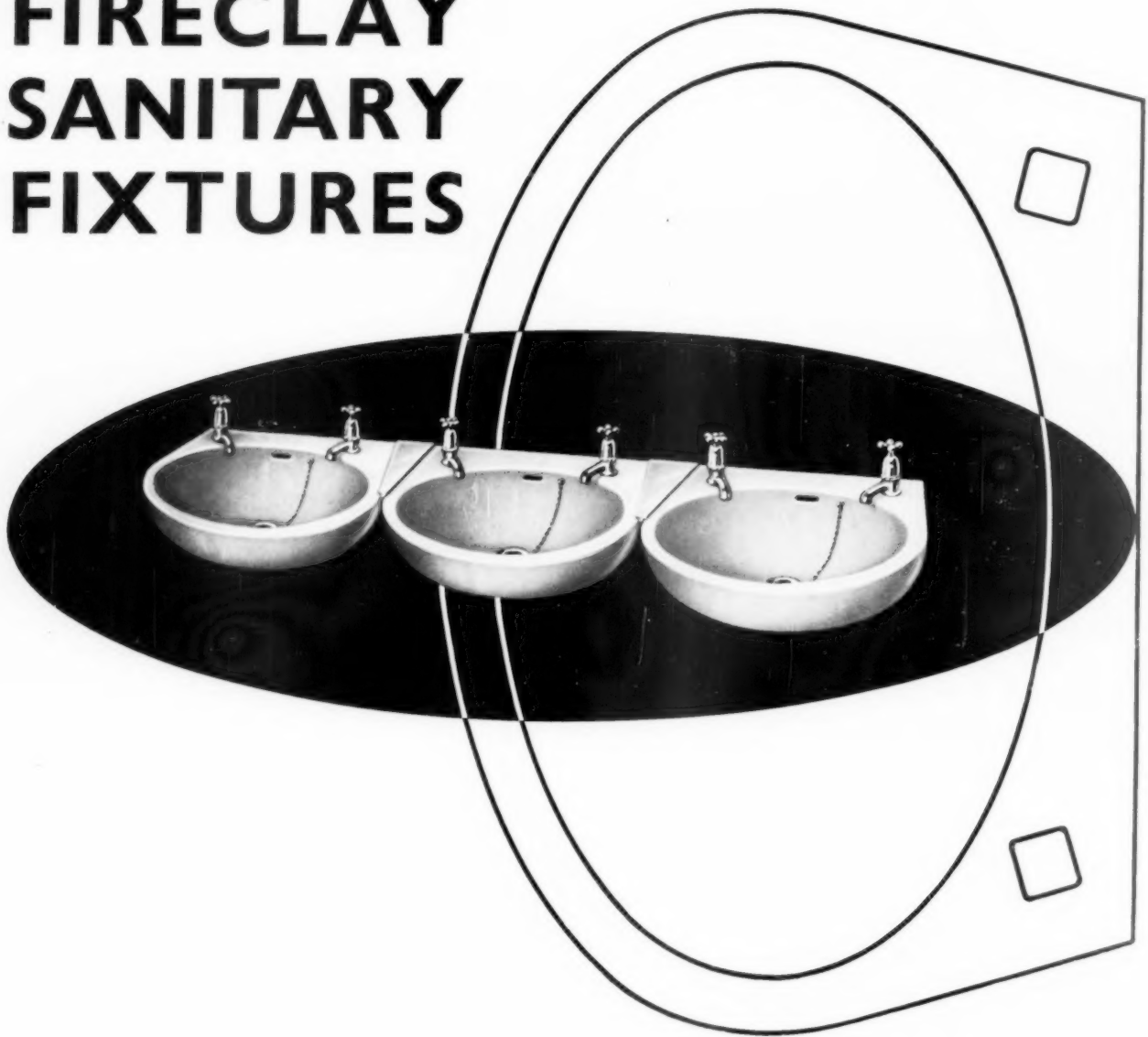




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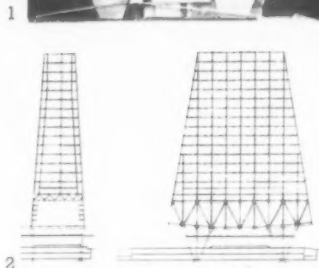
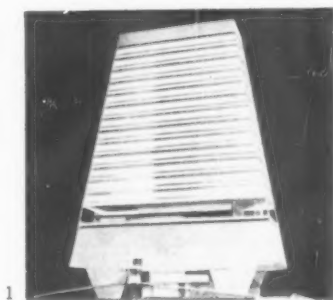
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## MARGINALIA

## Frustrated, Elevated Pyramid

Conceived in a form that is difficult to categorize except as a frustum of a rectangular pyramid, raised on stilts, the projected Federal Senate building for Rio de Janeiro, by Sergio Bernades and Rolf Huther, is typically Brazilian in the adventurousness of its shape, even if the shape itself, 1, is a newcomer to the Brazilian repertoire. Whatever the reasons for the choice of this total envelope, its structure and the distribution of the accommodation within it is of considerable interest. The windowless lower part is, structurally, a type of chassis, which collects the loads from the inclined



stanchions of the upper part on a series of transverse trusses, which transfer them to a pair of giant trusses in the outer skin of the lower part, and thus to the four tapering legs, 2. Within this frame, offices and smaller rooms are contained in the upper part, and the two large assembly halls are suspended between the chassis-members.

## S.I.A. Journal

All readers of those professional journals and house magazines that deal with the creative arts are accustomed to frequent changes of format and typography. No editor or editorial committee after all could be expected to resist the temptation of escaping occasionally from the drudgery of drumming up contributors and arguing with printers into the delights of giving the paper a New Look. Changes however are seldom so drastic or so successful as those which have been given to the Fifty-sixth number of the SIA Journal which, under a new editor, is now to appear monthly, unbound, folded, and about four times the size (in page area if not in contents) of its predecessors.

Most members will probably approve of the change, though no doubt objections will come from those who believe that the activities

of a professional body should be discreetly recorded in a publication that looks like a Government White Paper, as well as from those librarians who regard books and journals as something to be easily bound, filed and stored rather than looked at or read.

The AR welcomes the News-Sheet Look of an old friend, applauds the air of freshness, urgency and amplitude that it wears, and wishes it a long and prosperous career.

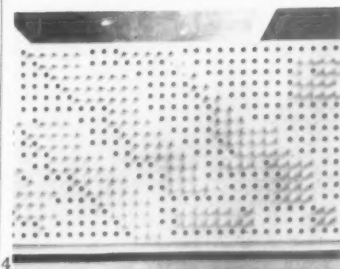
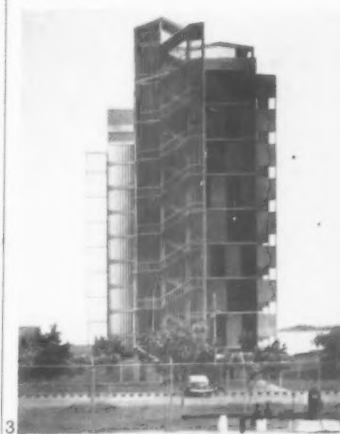
## Counter-Attack

A welcome success story in the fight against subtopia comes from Hampstead, where sustained pressure by the residents in a small Victorian street has dissuaded the borough council from cutting down the lime and plane trees, which are the street's principal asset. The story began nearly a year ago when the council decided, for reasons that were not very clear, that the trees must be cut down and replaced with mountain ash and birch. The residents, not convinced by arguments that the trees were unsightly, or too close together, and suspecting that the council was primarily moved by a desire to save the cost of lopping the trees every few years (itself the cause of unsightliness), got up a petition, which 100 of them signed. They followed this up with a deputation to the oddly-named Cemeteries and Open Spaces Committee, to which they presented formidable expert evidence, including copies of Peter Shephard's article on trees reprinted from the ARCHITECTURAL REVIEW's Counter-Attack issue, and a report on the Tanza Road trees by Miss Sylvia Crowe, F.R.S. She strongly criticized the proposal to replace the planes and limes by other species, and urged instead an intelligent policy of pruning to remove the unsightly growths caused by indiscriminate lopping. The deputation's principal arguments were summarized by an architect and town planner, Mrs. Ann MacEwen, who lives in Tanza Road. The result was that the committee decided to suspend the death sentence already passed on the trees to enable the matter to be reconsidered. And the final verdict, announced in September, has been a reprieve for all the trees except four limes, which are to be replaced by limes. All of which shows that an appeal to the good sense of a borough council, if supported by sound arguments and expert evidence, can prevent the wholesale destruction of trees now taking place in several parts of London.

## School of Architecture, Caracas

There has been speculation for some time about what sort of building for the Faculty of Architecture would crown the remarkable aesthetic enterprise that has produced the University City of Caracas, Venezuela, and the result, 3, is not altogether a surprise. The rest of the campus suggested a programme of advanced, but orthodox modernism, the Architecture Building, designed by Carlos Raul Villanueva, confirms it. At first sight the variously pitched roofs might seem to counter

this orthodoxy, but the materials are used in flat planes, like those of constructivist sculpture, not plastically, and the general orthodoxy is underlined by the architect's wholehearted adoption of the standard orthodox-modern programme of the 'integration' of the arts—a programme that manifests itself in the extensive use of exterior polychromy, and the consistent use within the building of the tight geometrical disciplines of the Albers-Max Bill school of abstract composition; 4 is a screen at the entrance of the Textures Studio. As Villanueva has said 'There can be no synthesis without discipline,' and it will be interesting to see how the student body reacts to this consistently disciplined environment; whether they will accept it as a physical order, providing the framework for a liberation of the spirit, or whether they will reject it as a spiritual tyranny, to be broken only by objects of gross physical plasticity, such as Brutalist sculptures and American cars.



## Victorian Design

The proposal to form a society to do for the buildings and furnishings of the Victorian and Edwardian eras what the Georgian Group does so devotedly for Georgian buildings, will be greeted with some head-shaking by those who still regard an interest in Victoriana as a mere fashionable whim. The founders of the society will have to convince these sceptics that Victorian architecture deserves the serious attention it is

now receiving from scholars and that it includes many buildings of permanent intrinsic worth, which ought to be preserved if possible.

It also of course includes a still larger number of buildings of no worth at all, and one of the first problems that will have to be faced is to decide on what basis the good should be weeded out from the bad. Aesthetic merit is not the only possible criterion. There are buildings that most people would agree to be extremely ugly and which yet represent some characteristic trend, some turning-point of taste, important in the history of the period. How highly are such buildings to be valued?

Moreover, the quantity, as well as the bewildering variety, of Victorian buildings is an embarrassment. English towns are largely composed of Victorian buildings. The Georgian Group can reasonably make it its aim to try to safeguard every remaining major building of the period. If this were the aim with Victorian buildings, the redevelopment of our towns would come to a full stop.

The choice of buildings to be safeguarded must be strictly limited. But that does not make it any less necessary for a choice to be made. Such a movement as this was bound to come, and the names of the people supporting it\* suggest that the listing of worthwhile buildings and whatever educational and propagandist activities the society may undertake will be responsibly conducted. They will not be inspired simply by nostalgia, nor by the cult of the unfashionable.

If the question be asked whether the time is ripe to treat the buildings and furnishings of so recent a period with the respect we accord to earlier ones, the answer surely is that examples are disappearing more quickly than we realize and that if we wait until Victorian and Edwardian buildings are more widely studied and appreciated, it will then be found that the evidence on which scholarly studies should be based no longer exists.

## Technologies at Sydenham

The 700-foot mast for television broadcasting which has recently been completed on the northern end of the Crystal Palace site, has added a new and spectacular landmark to the South London scene, 5. The photograph does less than justice to the elegance and ingenuity of its lower structure—no two dimensional medium ever could—but it does draw attention to a sorry admixture of technology and its consequences around the base of the mast. Just beyond it are the last survivors of

\*Those present at the inaugural meeting included Lord and Lady Rosse, Lord Escher, Mr. John Betjeman, Mr. H. S. Goodhart Rendel, Mr. Christopher Hussey, Mr. James Lees-Milne, Mr. R. Furneaux Jordan, Mr. Osbert Lancaster, Mr. John Piper, Mr. Oliver Messel, Mr. John Pope-Hennessy, Mr. James Pope-Hennessy, Sir Hugh and Lady Casson, Mr. J. M. Richards. Letters of advice and encouragement were read from Sir Kenneth Clark and Dr. Nikolaus Pevsner.

5



Paxton's original structures, the water towers, carried on their elegant three-dimensional grids of standard prefabricated elements; to the right of the mast is neatly designed contemporary entrance unit to the underground broadcasting sub-station below the mast. The tidy façade that this entrance turns towards the Palace grounds is unfortunately invisible in this view, but the squalor of the waste-land camping-site in the foreground is unfortunately all too visible. The L.C.C.'s plans for redeveloping the site should remove this particular blight—but where will the caravans go then?

#### Van de Velde

With the death at the great age of 94 of Henry Clemens van de Velde, one of the few surviving links with the generation of the pioneers of modern design has parted. Although, like most Belgians of his time, he started his artistic career under French influence, and studied under Carolus Duran, his main contributions to the progress of design were made within the very different world of German progressive art. His earliest Art Nouveau designs, misunderstood in Paris in 1896, were an outstanding success at the Dresden exhibition of the following year. In 1900 began his association with the Folkwangs Museum in Hagen, and two years later he became artistic adviser to the Grand Duke of Saxe-Weimar. In this latter position he undertook that reorganization of art and craft instruction in Weimar on which Walter Gropius later built the Bauhaus. He left Weimar in 1914, because of the War, and subsequently lived mostly in Switzerland, apart from a spell of duty as head of the Institut Supérieure des Arts Décoratifs in Brussels, beginning in 1926. As a reader of Ruskin and Morris, he did much to distribute their ideas of a morally and politically healthy art on the Continent, and in his own mind this ranked far more importantly than the contributions he made to the formal language of Art Nouveau—in the extract of his memoirs that appeared in the AR for September, 1952, he gave his own estimate of their relative importance, an estimate that historians may, or may not, ultimately come to share.

#### Early American Industrial

When the sketch below, 6, was reproduced in a recent issue with a letter from Mr. Rupert M. S. Kay of Manchester, it should have been made clear that the structure it



6

illustrated was at the US Navy Yard at Washington. Built in 1833, it bears a close resemblance to the covered ship-launching slip at Deptford shown on the cover of the AR July issue, 7, below.



7

#### CORRESPONDENCE

##### The Chinese Dome

To the Editors,

SIRS,—A letter in your issue of January, 1957, from Mr. R. Faudree, of New College, Oxford, concerning the early achievements of the Chinese in the science of vaulting, requires a note of emendation.

The key monument to which Mr. Faudree refers has, as he points out, been published in a fairly careful monograph, with a title that might be translated *The Wall Paintings of the Han Tomb at Wang-tu* (Peking, 1955). Architectural drawings done with an obvious professional skill and a number of good photographs explain the structure of the tomb clearly. Its ground plan one might describe as a cross with two horizontal (east-and-west) arms, elongated in something like the fashion of Fonthill Abbey (to use an analogy close to the hearts of readers of the REVIEW). Each of the seven chambers and the passages between them is covered by a pointed tunnel vault of brick (the bricks being laid lengthwise instead of in the voussoir sense familiar in the West). Nowhere is there any sign of the 'two large pointed domes set on the square and using the squinch,' to which Mr. Faudree refers. Where the Romans might have introduced a cross-vault, at the intersection of the main, north-and-south axis with that of the middle chamber and its two wings, the Chinese masons took the simpler course of keeping the minor vault over the passage well below the springing of the transverse tunnel, to avoid any puzzling complications. As for the 'highly sophisticated technique of stone and brick construction,' this seems to boil down to the fact that the doorways are spanned by stone voussoirs and



8



9

lintels, and that the vaults are to some extent—the text is unclear—protected by stone relieving arches.

Recent excavations have shown that later brick tombs with square central chambers are typically covered by cloister vaults. The one exception that I have found is published in the Peking National Library's monthly, *Wen-ku Ts'un-k'ao Tzu-liao*, 1956, pages 42-44. This tomb, found in Chiang-ninghsien in Kiangsu province and attributed to the 'early Six Dynasties period,' shows a vaulting technique related to the squinch, since it begins with the corners as a first premise. Instead of the corner pocket to which we are accustomed, however, each squinch system is allowed to expand until it meets its neighbours. Unfortunately the upper part of the vault is too ruinous to show how the resulting dome was worked out; the photographs are indecipherable, and the description is written in a newly-coined jargon which I do not fully understand. The date would presumably be the fourth century AD.

Yours, etc.,

ALEXANDER SOPER,

Bryn Mawr College, Pennsylvania.

##### Pedrocchino

To the Editors,

SIRS,—I have read with much interest your article 'Pedrocchino and some allied problems.' May I take the liberty of drawing your attention to another Neo-Gothic building by Ippelli, the Casa Romati also at Padua, perhaps planned after his journey to London and therefore of the period 1837-40. This building was briefly illustrated in the article on Ippelli published by Roberto Carta Mantiglia in *L'Architettura* of November-December, 1955. It may be of interest to your readers to see some illustrations of it.

Yours, etc.,

FERDINANDO BELLONI,  
Architectural student at  
the Politecnico of Milan.

##### House at Watford

To the Editors,

I am disgusted that you printed such a meaningless and ridiculous



**Pedrocchino:** four illustrations of Ippelli's early Neo-Gothic Casa Romati at Padua, referred to in the letter below. 8 and 10, the garden front, details from which are shown in 9 (one of the central bays); and 11 (end part of bays). The street front has been entirely altered into nineteenth-century Italian classical style.

10  
11

letter. Mr. Harrison has collected together a series of words, which show no constructive criticism of the design. It is obvious that he just has not looked at the design carefully, nor has he analysed the plan to see if it works, and then to see how the elevations are dictated by the plan form, i.e. do the windows let the right amount of light in at the right place. At a first glance, the house does appear rather curious, but by studying it closely, it becomes obvious that it is a very sensible solution to the problem.

How Mr. Harrison can say that it is worse than the surrounding spec. built houses, I fail to comprehend. The Smithsonian house definitely appears as a brick box, punched with holes to let in the right amount of light at the right place, and the brickwork dominating, whereas, as the architects point out, the spec. built house is neither a domination of brickwork nor of windows and this produces a very indecisive and anemic result.

Incidentally has Mr. Harrison seen Vanbrugh Castle, Blackheath where there is a domination of brickwork punched with holes, the shape of those holes coinciding to the shape of the towers, the upper windows relating to the horizontal coping and the lower windows to the scalloping beneath the coping; just as, in the Smithsonian house, the windows in the southwest elevation coincide with the horizontal caves, and the windows on the southeast elevation follow the shape of the roof line.

Maidstone, Yours, etc.,

Kent. K. FAIRBURN.

#### ACKNOWLEDGMENTS

COVER: Galwey, Arphot. MARGINALIA, pages 1-2, 5. The Times; 8-11, F. Belloni. FRONTSPIECE, above, Toomey, Arphot; below, Galwey Arphot. PREVIEW, page 14, below, page 19, below, page 20, top, page 38, top left, page 43, top and centre, page 65, both and page 71, top, Alfred Cracknell; page 20, remainder, W. E. Middleton; page 23, L.C.C.; page 29, above, Patricia Cain; below, Studio Swain; page 33, above, page 44, top and centre, page 49, bottom left, page 50, top and bottom, page 55, centre and bottom, Sydney W. Newbery; page 37, below, Wallace Heaton; page 38, top right, Larkin Bros.; page 55, top, P.W. & L. Thompson; page 56, top and centre, Mann Bros.; page 71, centre, Thomas Photos. All remaining photos were taken by Galwey, Arphot. COUNTER-ATTACK, page 76, Nairn, Arphot.

# THE ARCHITECTURAL REVIEW

Volume 123 Number 732 January 1958

## SPECIAL PREVIEW ISSUE



This Month's Cover shows a model of the terminal buildings now under construction at Gatwick Airport—architects, Yorke, Rosenberg and Mardall. See also pages 48, 49. It is one of seventy-six projects illustrated in this the fifth of the Review's annual preview issues in which readers are given advance news of building in Britain during the coming months.

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### 4 Frontispiece

### 5 Foreword

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- 10 Community Centre: Dagenham, Essex *Edward D. Mills and Partners*
- 10 Entertainments Building: Eastbourne *Westwood, Sons and Partners*
- 11 Shops and Offices: Basildon *Noël Tweedell*
- 12 Civic Buildings: Hayes *Clifford Culpin*

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- 27 Synagogue: St. John's Wood *T. P. Bennett and Son*

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- 32 Library, Hall, etc.: Dundee *Robert Matthew and Johnson-Marshall*
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THE ARCHITECTURAL REVIEW

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In London and in the provinces new architecture is being increasingly dominated by an almost standardized modern style of design partly brought about by the widespread use of standard components like curtain walling, and partly by the natural process whereby a movement that starts with a number of experiments in form and evolves therefrom a number of accepted clichés, eventually crystallizes into a style. This phenomenon is discussed in the article opposite. Here are two typical illustrations of the process at work in the shape of two large office blocks now under construction in London and Birmingham, each dramatically overtopping the antique or conventional buildings among which it is set and therefore revolutionizing the scale of the urban landscape. Above, Bucklersbury House in the City, by Campbell-Jones and Sons. Right, the 'Big Top,' Birmingham, by Cotton, Ballard and Blow. Both were included as projects in earlier Preview issues of the REVIEW.





# FOREWORD

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This annual Preview issue of the *Review*, which offers readers a glance ahead at the new buildings about to go up or already in the early stages of construction, presents an obvious opportunity to discover characteristics common to the coming year's buildings and to generalize about the way architecture is going. In some years there is nothing to discover except what is self-evident, and no trends to be observed that a different choice of examples might not seem to reverse; but from a study of this year's projects there does seem to emerge one interesting new tendency, a tendency, moreover, that the examination of an even larger number of projects than are included here confirms rather than contradicts.

This tendency can best be defined as an ability to produce designs of a competent modern character, showing itself in long-established offices presided over by architects who have played no part in the evolution of modern architecture in this country. Only a proportion of the projects illustrated on the following pages conform to this definition, but those that do represent, in the view of the Editors, a phenomenon of such significance that they feel justified in introducing the whole issue with some comments on it. It is only a short while since the output of modern architecture depended almost wholly on the offices—indeed on the individual pencils—of the few architects who had helped to shape it in the nineteen-thirties; and as we saw young architects with the same ideas coming out of the architectural schools we assured ourselves that modern architecture would soon be spread about more widely as a natural result of there being more modern architects, by which we meant more architects—if we were optimistic, a whole generation of them—with something new and personal, as well as modern, to say.

But it does not seem to be working out like that. What we must still call modern architecture (though the term has not quite its former exclusive significance) is certainly spreading, and of course the younger generation is making its contribution; but the new recruits that are making the strongest impact on it are the established firms of architects who have recently gone over to designing in a modern style. We foresaw a long period during which the traditionalists would be fighting a last-ditch battle against the growing numbers of modernists, but this simple picture has become confused by the enthusiasm with which

many of the former have taken to brandishing the weapons—or at least passable imitations of the weapons—previously wielded by the latter. When we complained about big blocks of offices in the City and elsewhere being put into the hands of architects with out-of-date ideas and outmoded aesthetic predilections, we hoped that as a result of so much criticism future commissions of this kind would be given to younger and more enterprising men. Although the standard of design of big city buildings is still far below what it should be, it has improved, but not because younger firms are doing them; in many cases the improved work comes out of the same offices that were responsible for the criticized work.

It may be argued that this is simply the new generation working in another guise; that the apparent change of heart on the part of some busy architects of the older school is the result of more responsibility being given to young men entering their offices. This must partly be so, but it is not the only reason and, even if it were, the architecture that results from their efforts has a recognizable, somewhat standardized, character of its own—typical of a great deal that is being built today—which arises no doubt from the impersonal nature of the process of design. Other reasons are the availability of standard components and systems of construction, like curtain walling, which have made the idiom of modern architecture easy to adopt, as it were, ready-made, and the wide currency given to certain design clichés which possess, for the busy architect, the same advantage.

The outcome of all this is that much modern architecture, and especially that of the well-established office which has suddenly turned modern, relies on a fairly standardized style of design, based on a limited number of accepted elements and forms, which has very little to do with the never-ending search for new forms and modes of expression on which the creative energies of the nineteen-twenties and the nineteen-thirties were engaged. It is not necessarily any the worse for that—architecture cannot feed interminably and exclusively on the fruits of original experiment—but the nature of the problems architecture has now to meet is thereby changed. Modern architecture, as now practised by the many, has largely become what we declared it never would be when it was the artistic creation of the few: a *style*—with its own rules and limitations by which those employing it are strictly bound for the very reason that they are following a fashion, not creating one. The expected struggle against the upholders of traditional styles has become instead a struggle to maintain quality and to ensure that the current style is intelligently used.

In one sense this new situation is more promising than the old one. The battle of the styles was not a battle the perceptive modern architect was very happy about. Too often it compelled him to fight with arguments that his beliefs told him were no longer valid, and it brought him face to face with the imponderabilities of taste: the unanswerable “I know what I like”. The critic and the enlightened man in the street must continue, perhaps for a long while, the process of persuading the client, the business-man and the less informed public that they are mistaken when they still pin their faith to the charms of sentimental and historical reminiscence. But the architect is free now to concentrate on more realistic issues like quality and flexibility, and in doing so he has the opportunity of correcting any mistaken impression which the battle of the styles may have created, that the external appearance of a building could be discussed and judged independently of other things, like planning and construction; indeed, that the whole three-dimensional conception was not one and indivisible.

At the moment, however, we are discussing primarily the building as it is seen; in fact,

style, if that is a word we can bring ourselves to use; and especially the efforts, evident in the best work shown on these pages, to ensure that whatever is gained by allowing modern architecture to become, in the hands of most of those who practise it, a style, is not more than offset by loss of the freedom the pioneer modern architects fought for—in short, that we have not jumped from one strait-jacket into another.

A glance at the projects illustrated here shows at any rate that there is no threat of absolute standardization. In spite of the increasing use of curtain walling and similar systems there is an almost bewildering variety of form and structure and plenty of evidence of fertility of invention. Of course these projects do not represent a true cross-section of the work that is being done in the modern style. Among them are designs by several of the architects who have worked in a creative spirit since the early days, and others by younger architects who are carrying on the same tradition. But more typical of the present moment are the designs which it would not be unjust to describe as exercises in the use of certain accepted design routines. The significance of these lies not only in the prominence they have lately attained but in the fact that, owing to the way commissions, especially in the business world, are allocated, routine designs produced in the established offices that have adopted modernism whole tend to occupy the most prominent sites. The controversial new projects with which advanced ideas in architecture are associated in the public mind—the much-discussed skyscraper hotels, tower blocks of offices on riverside sites and the like—are almost invariably of this character—modern in style, but not for that reason alone, as a few years ago they would have been, good architecture.

There is no need to recapitulate here the advantages of a modern style.\* It provides the ordinary architect (as distinct from the man of genius, who is always a law to himself) with a tried answer to normal problems to which there is no reason to seek an original solution on each occasion. It makes it more difficult for him to go badly wrong. By furnishing architecture with an easily recognizable vocabulary it also makes it less bewildering to the public, whose interest is alienated when the art becomes too esoteric.

The disadvantages—or rather the dangers—of a modern style are also obvious and have become more so since we acquired one. First, of course, it encourages superficiality; the mere clothing of a building in a fashionable dress. Clichés as building elements and as a standard answer to problems of detail are one thing: whole buildings which are themselves clichés are another. A more insidious danger lies in the fact that ready-made systems of design which appear to make architecture easier in fact make it more difficult because real subtlety of form, and the exercise of the imagination in the play of form, are discouraged.

The modern architect, who knows that he must come to terms with the modern world which has produced among other things the industrialization of building components, by making it serve his purposes and not by becoming its slave, is now faced with three major tasks: to learn to use standard components subtly and imaginatively, to persuade industry to provide components which offer the best possible scope for doing so, and to persuade those who decide about by-laws and planning regulations to provide conditions which permit him to do so. The last is doubly important, because if it can sometimes be justly said that such inventions as the curtain wall go too far towards designing an architect's building for him, it can equally be said that the multiplication of by-laws and regulations tends to do exactly the same.

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\* See J. M. Richards: 'In Defence of the Cliché'. *AR*, August, 1953.



This problem may seem far removed from the question of an emergent modern style with which this foreword began, but the effort to achieve the right, and eschew the wrong, kind of standardization takes many forms. A standard design idiom is not an objective in itself, but a tool with which architecture can be fashioned well or badly. The possession of such a tool at least simplifies our task in one way: we no longer have to exclaim with pleasure that a building is modern; the projects shown on these pages are only a few dozen out of some hundreds that might have been included. We can concentrate on the real values of architecture, remembering that although in the long run quantity assists quality, it does not guarantee it.

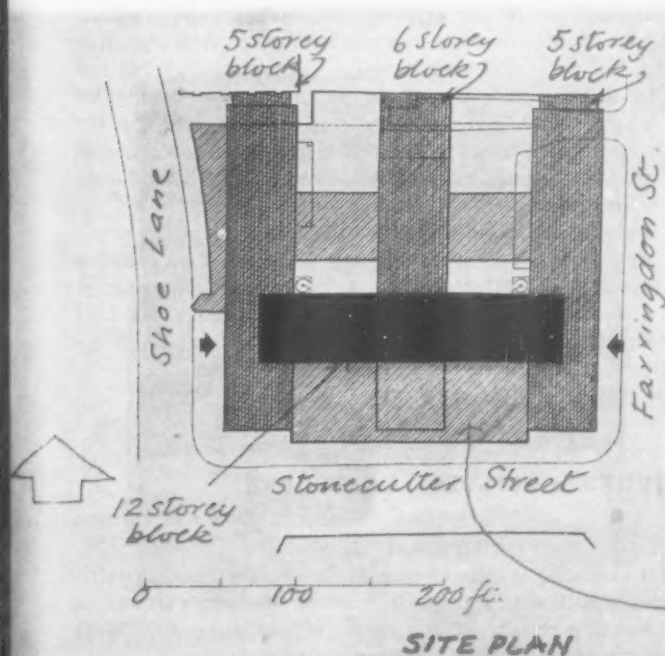
the editors

## **1** PUBLIC BUILDINGS



*New telephone building now under construction in the City of London, designed in the chief architect's department of the Ministry of Works. It will house the FLEet telephone exchange.*





## TELEPHONE EXCHANGE: CITY OF LONDON

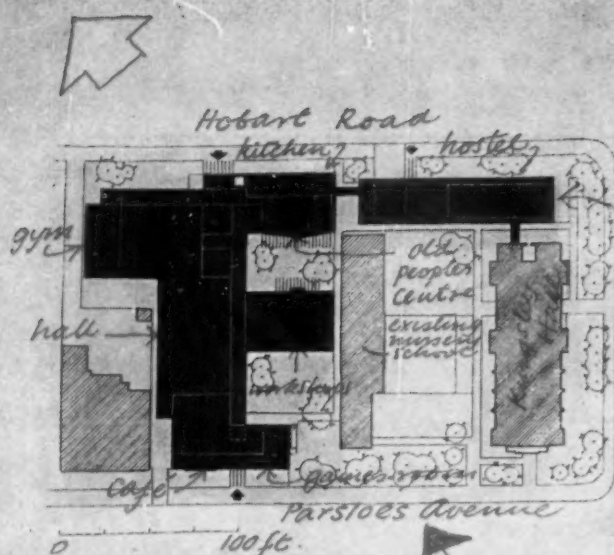
Ministry of Works

For the new FLEet exchange, to accommodate apparatus, switch-rooms, etc., and telephone managers' offices. The site is in Farringdon Street, E.C.4. Work began last summer.

The plan-shape was determined by Post Office engineering requirements, which included a large cable-chamber at sub-basement level, running the full width of the site, to take all incoming cables, and a large apparatus area serving a number of switch-rooms, each capable of operating independently with its own staff. The basement and ground floor contain apparatus as well as a low-level garage reached from a yard at street level. The main entrance is from Farringdon Street, but there is also a staff entrance in Shoe Lane, 15 ft. higher owing to the slope of the ground, which gives direct on to the first floor where the main apparatus area is planned. The switch-rooms served by this are on the second and third floors. On the second floor there are also conference rooms. The fourth to twelfth floors accommodate the office staff for two telephone managers. A dining-room, with kitchens, for the occupants of the whole building is on the first floor. Lavatory accommodation is planned vertically to utilize internal ducts.

The building has a reinforced concrete frame on a module running in both directions designed to fit Post Office apparatus layout. Floors are of flat slab construction stiffened by the lift towers. External cladding consists of standard slabs with Portland stone facing fitting between concrete columns. These alternate horizontally with hardwood frames containing single-light fixed or horizontally pivoted

## 1. PUBLIC BUILDINGS



SITE PLAN

windows. End walls to the 5-storey wings and the tower block are faced with Derbydene stone with small areas of coloured mosaic.

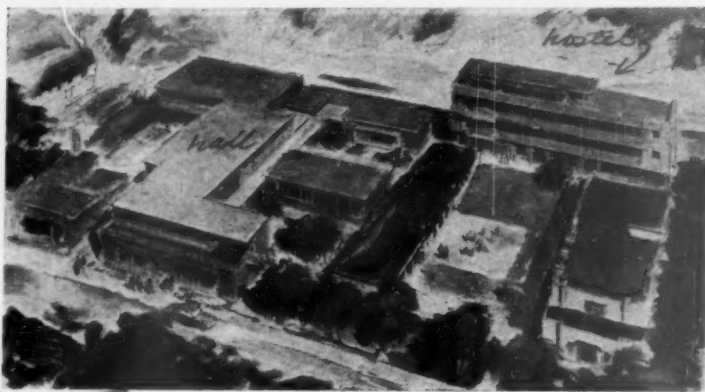
Senior architect in charge: W. S. Frost.

### COMMUNITY CENTRE: DAGENHAM, ESSEX

Edward D. Mills and Partners

An extension of Kingsley Hall, which serves an LCC housing estate and consists now of two main (pre-war) buildings, a nursery school and a number of temporary buildings, which latter are to be cleared away. The new buildings, on which work will start early this year, include a centre for old people, workshops, a gymnasium, a hall, a café and a hostel.

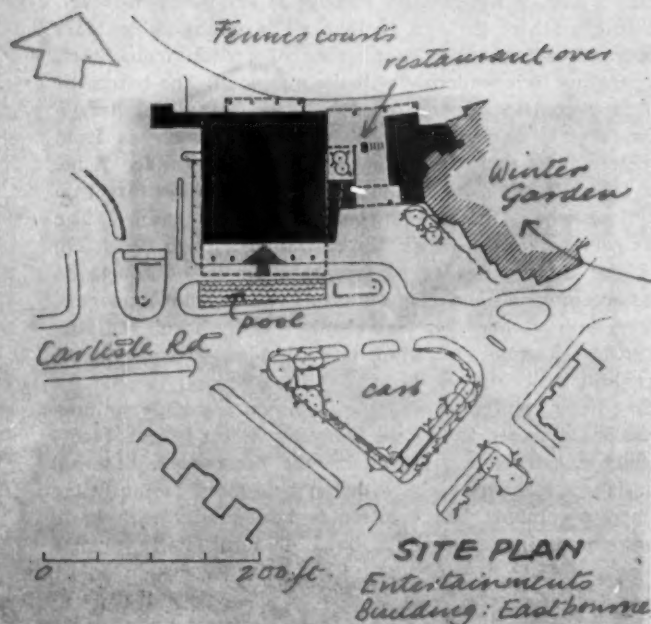
The old people's centre is designed, among other purposes, to give better facilities to an existing old-age pensioners' luncheon club.



The hall has a stage and dressing-rooms for amateur theatrical productions (the present Kingsley Hall Dramatic Group now uses the inadequate facilities of the existing hall), and the café, placed on the main road frontage with a games room attached, is designed to supplement the poor eating facilities of the neighbourhood and to be open in the evenings as well as at lunch-time. The hostel occupies a separate block on the rear road and is designed for young people, especially those working far from their own homes as apprentices in the Dagenham industries. Combined with the hostel are staff living accommodation, offices and a warden's flat.

Since the centre will be built in stages as money becomes available, it has been designed on a unit system of construction, using a light steel frame and infill panels of brick, precast concrete or coloured glass. A new oil-fired boiler in the new buildings will heat the whole group of buildings, old and new.

Quantity surveyor: Leslie W. Clark.



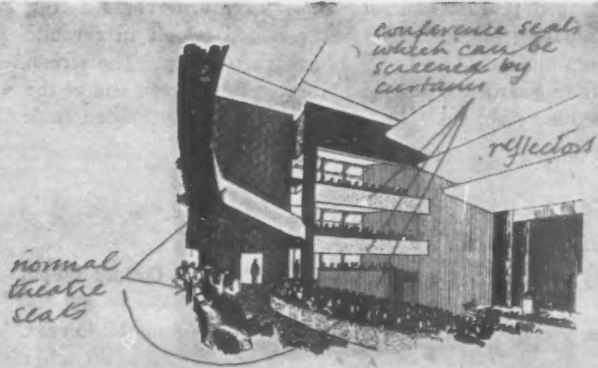
SITE PLAN  
Entertainments  
Building: Eastbourne

### ENTERTAINMENTS BUILDING: EASTBOURNE

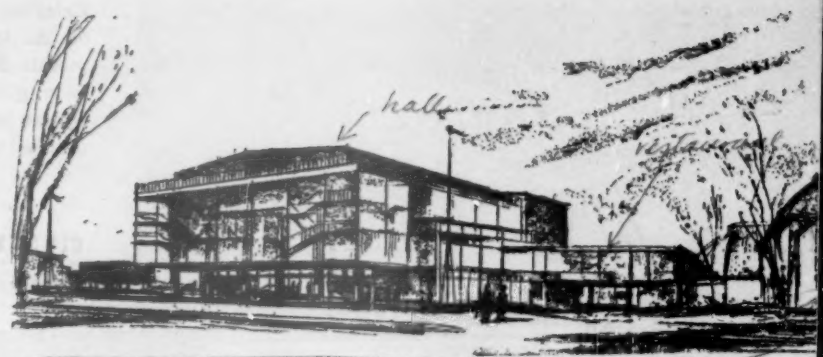
Westwood, Sons and Partners

Adjoining the existing Winter Garden at Devonshire Park. Requirements included a hall, with stage, suitable for conferences as well as plays and concerts, a restaurant and foyers, etc., to serve both. Work will begin as soon as the financial situation permits.

The long axis of the building has been placed across the site so as to utilize the slope of the ground and to bring the main front, containing the foyer, bars, etc., forward where it can be seen from neighbouring streets and attract its own publicity. The restaurant will serve both the new building and the tennis ground behind the



Interior of hall



Winter Garden,) and has therefore been placed between the new and old buildings at first-floor level, with access to the tennis courts beneath it. The kitchens are built on to the old building. The multi-purpose hall, which has a raking floor and one gallery, is designed to provide 1,700 seats (plus standing room) when used for conferences, 1,500 when used as a variety theatre, and 1,000-1,250 when used for plays or concerts. The shape of the auditorium was determined by the need, during conferences, for a large number of seats close to the apron stage which can be screened off when the hall is used for other purposes—they therefore occupy wallspace not required as an acoustic reflector—by the fact that a shallow fan shape is unsuitable for concerts and plays and by the demand for a wide proscenium opening.

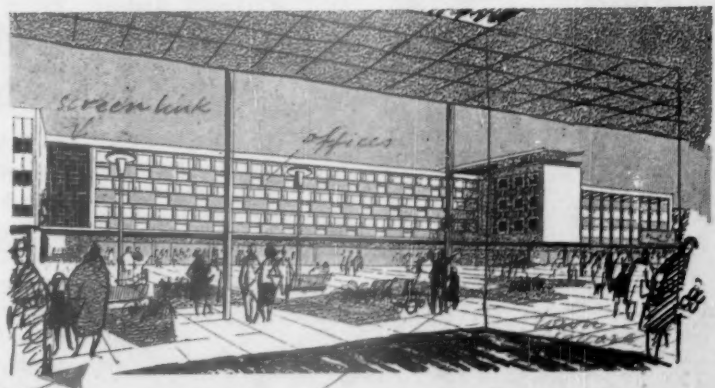
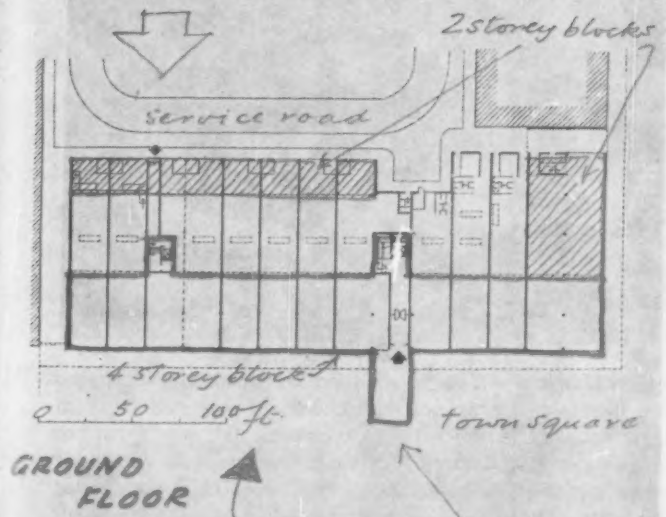
The structural system is not yet fully worked out but it will be a concrete frame building, permitting the use of natural light and air, which were considered necessary in a conference hall that might be in continuous use for several days.

Consulting engineers: Ove Arup and Partners.

### SHOPS AND OFFICES: BASILDON

Noël Tweddell (Chief Architect, New Town Corporation)

Included among public buildings because of the important position it occupies in the town square in the main town centre—which has been largely redesigned since a preliminary scheme was illustrated in the January preview issue, 1956. The building, of four storeys, is on



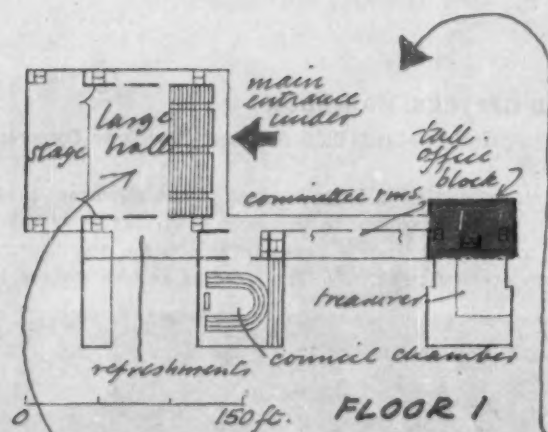
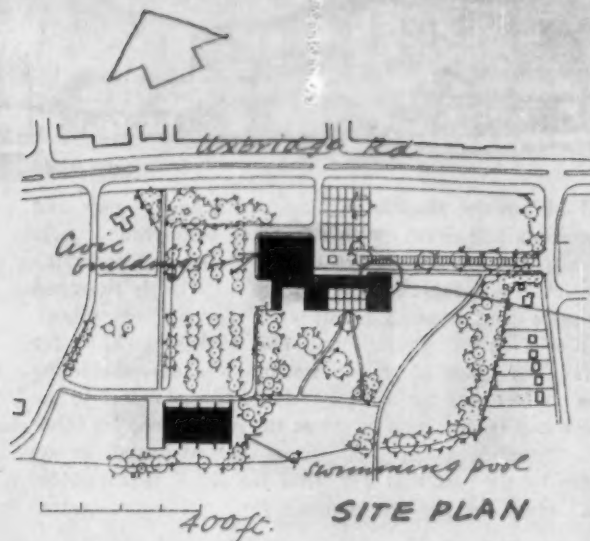
the south side of the town square. Work on the foundations began last October.

The ground floor comprises twelve shops, eight of which have storage and lavatory accommodation at an upper level at the rear. The upper three floors provide 29,500 sq. ft. of offices, including a pavilion projecting 40 ft. into the square. Each floor is designed to allow partitions to be erected at 6 ft. 8 in. centres. There is one passenger and one goods lift.

The building is steel framed on a 20 ft. grid with hollow-pot floors.



## 1. PUBLIC BUILDINGS



External walls are precast concrete slabs with a terrazzo facing on the town square frontage which has recessed panels in ceramic mosaic. Steel mullions are faced with reconstructed stone. The screen linking the building with the adjacent block at the eastern end of the square is of welded steel tube. The offices are centrally heated from oil-fired boilers.

### CIVIC BUILDINGS: HAYES

Clifford Culpin

To serve as a civic centre for Hayes and Harlington, Middlesex. The scheme, which has been approved by the council although a starting date has not yet been fixed, comprises a council suite (council chamber, committee rooms, members' rooms, etc.), large and small halls and council offices. The site adjoins the main Uxbridge Road, and a green strip links it to the existing town-hall park to the south-west. There is parking space for 300 cars to the west of the new building.

The building is planned for construction in three stages, beginning with the offices. These occupy a 10-storey tower, with the treasurer's department (that most often visited by the public) on the ground floor. Adjoining it is a single-storey rates hall. The office block is linked to the lobby of the first-floor council chamber by a range of



committee-rooms, below which is an open colonnade. Beneath the chamber are members' rooms, and alongside it a refreshment room with kitchens beneath. These, with a caretaker's flat over a row of garages, enclose a small members' courtyard. The two halls with their ancillary accommodation are placed nearer the road, enclosing a paved entrance forecourt. The small hall at ground-floor level seats about 200 and has its own entrance on the north side. The main hall, seating about 1,200, is above. There is ramped fixed seating at the back and movable seating at the front on a floor sprung for dancing. The stage has dressing-rooms and storage space beneath. The refreshment room and kitchen between the hall and the council suite are planned also to serve both halls.

The building is of reinforced concrete frame construction throughout. Cladding materials are not yet decided but a large amount of glass will be used.

Consulting engineers: Ove Arup and Partners.

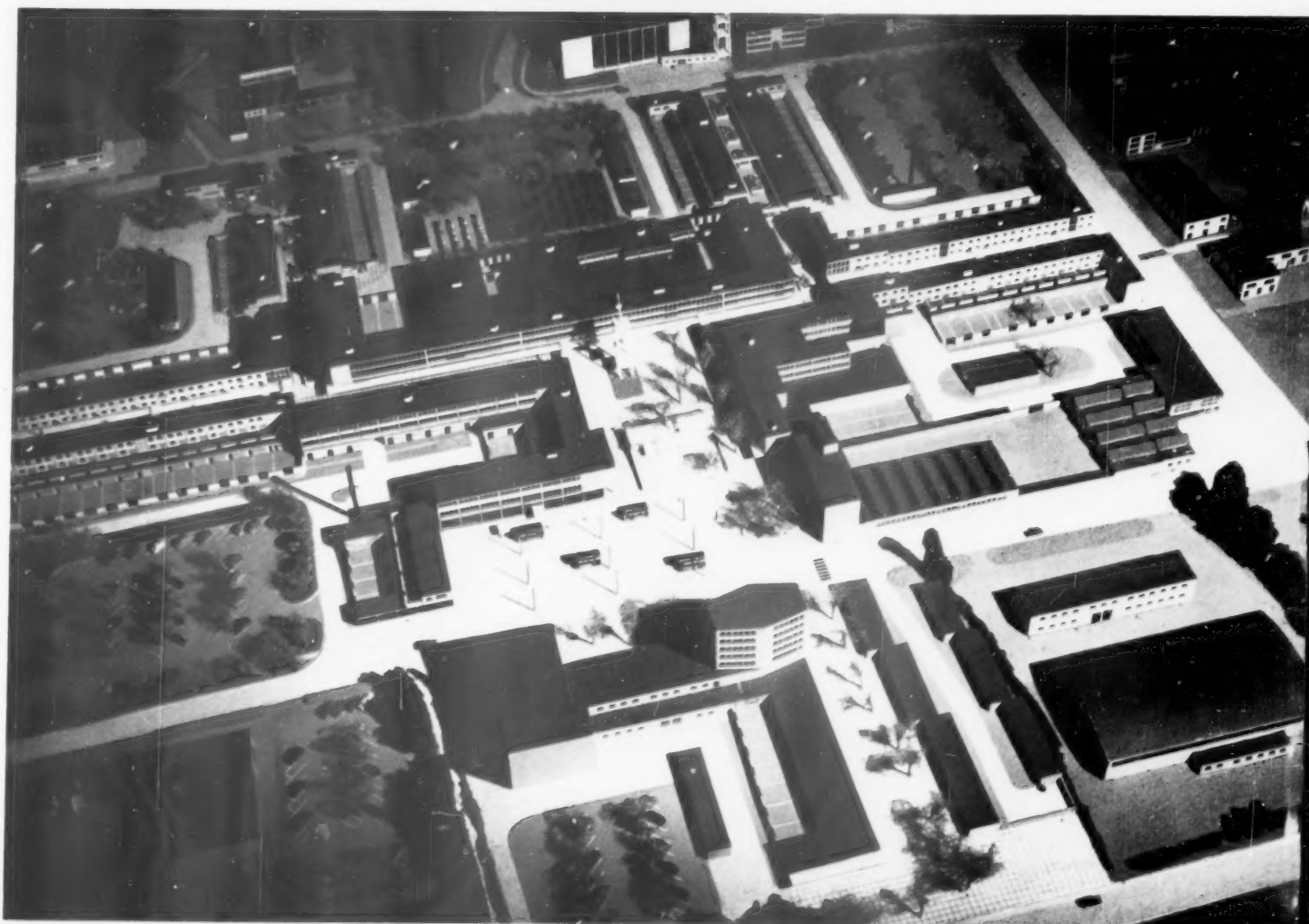


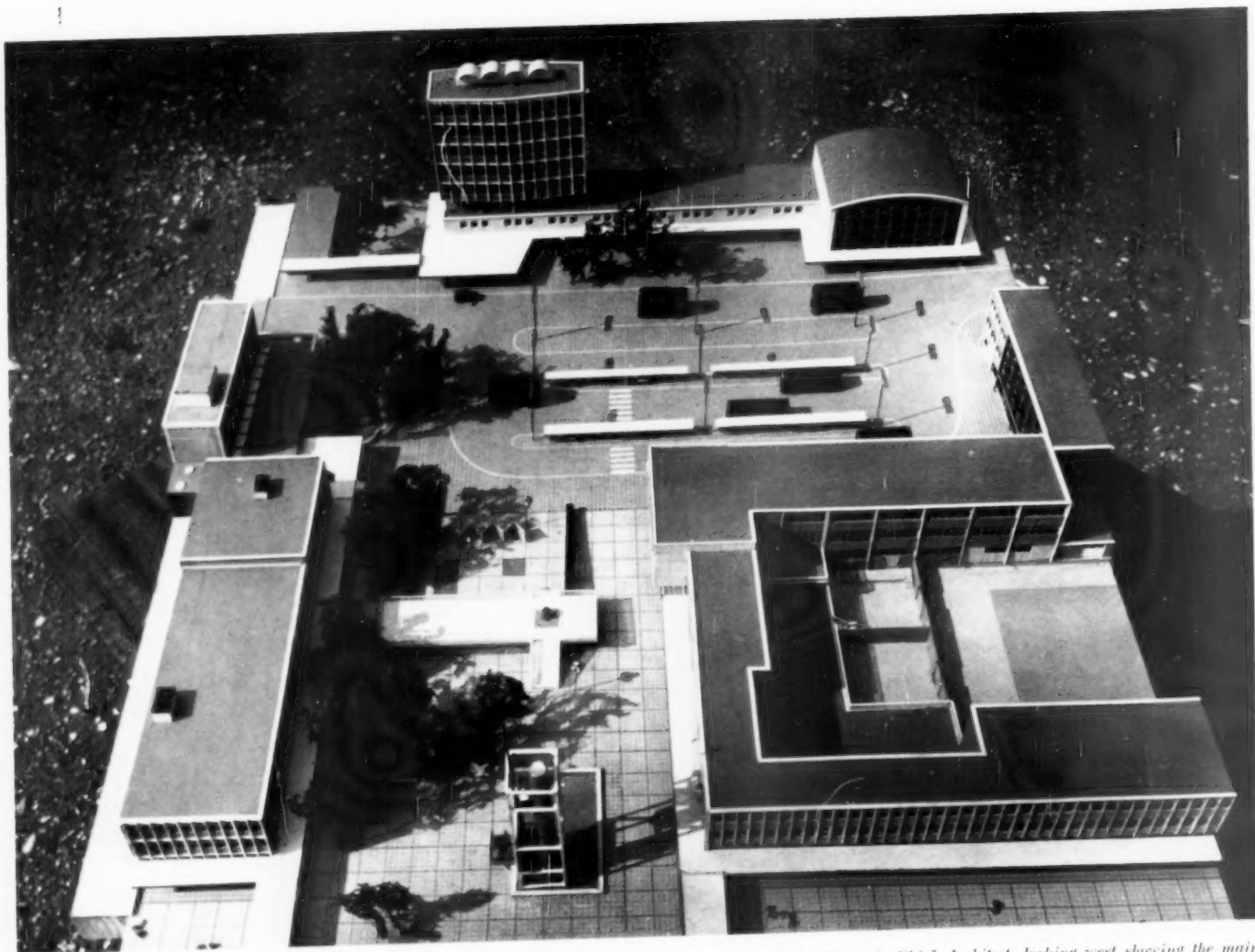
# 2

## PLANNING SCHEMES



*The town centre at Stevenage, by L. G. Vincent, chief architect to the development corporation: left, from the south, with the bus terminus on the left and the town square opening off it; below, from the west, with the main shopping way running across the picture, behind the tower which stands in the main square. See also next page, and description and layout plan on following page.*



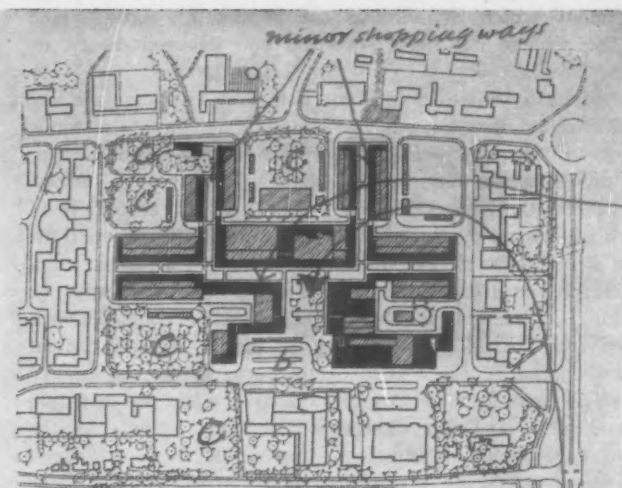


*Above, town centre at Stevenage by L. G. Vincent, Chief Architect, looking west showing the main square closed at the far end by a raised platform, and the bus terminus beyond. See also the preceding page.*

## 2. PLANNING SCHEMES

*Below, Park neighbourhood centre, Swindon, by Frederick Gibberd, from the north looking into the north pedestrian precinct, with the main square and the south pedestrian precinct beyond.*





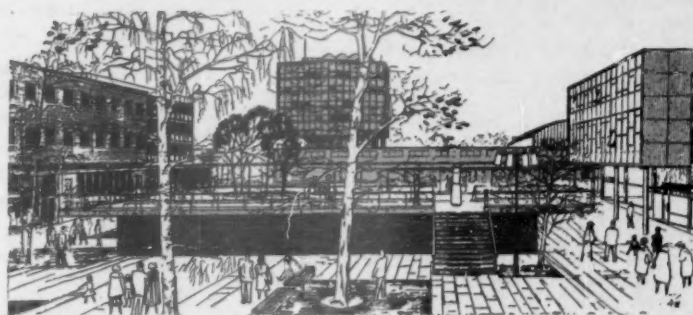
500ft  
**SITE PLAN**

## TOWN CENTRE: STEVENAGE

L. G. Vincent (Chief Architect, Development Corporation)

Phase I of the new town centre (constituting probably the largest all-pedestrian shopping area in Europe). Due for completion next September.

The pedestrian shopping core consists basically of a main north-south shopping way 50 ft. wide, with the town square at right angles to it to the west and two minor shopping ways of 40 ft. wide to the east. A ring road surrounds the central core, off which large car parks are planned at the rear of the shops, giving walking access to any part of the centre. A bus interchange point is situated on the ring road to the west of the town square and buses will arrive and depart here from London and the region as well as locally. The heart of the core, the square, contains a tower and a pool, and several



the town square mature trees have been preserved to soften the hard landscaping. The square is surrounded on three sides by 3-storey shopping units and on the fourth (to the west) is partially closed by a raised platform. From here steps lead from the highest level of the bus terminus to the floor of the main square. Easier changes of level are obtained by ramping. All the furnishings in the square and the rest of the scheme, including seating and circular cycle stands around bollards, have been designed by the architects. Multiple stores are situated in the main square, designed by various architects who have worked in co-operation with the Development Corporation architects. The pedestrian shopping links consist of smaller shops with living accommodation—flats and maisonnettes. An open-air market is placed in conjunction with one of the car parks and service roads. A canopy serves the whole of the shopping frontage, with cross canopies at various points to ensure completely dry shopping.

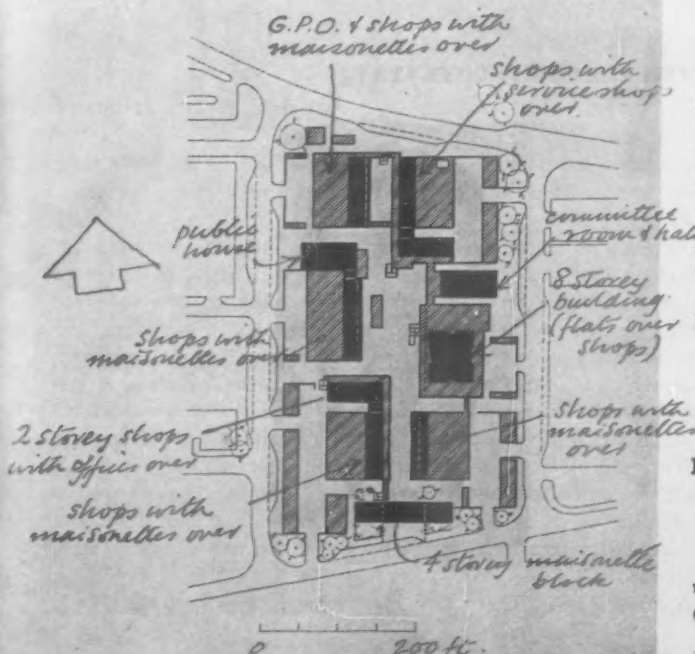
The larger buildings are constructed in a precast concrete frame with in-situ floor slabs and precast reinforced concrete purlins forming the roofs. Infilling walls are of glass and various types of panel, including reconstructed stone, concrete with exposed aggregate and Kentish flint. The 3-storey maisonnettes are of cross-wall construction with concrete floors and roofs. The 2-storey blocks are of load-bearing brick. Heat to some of the larger stores and the flats and maisonnettes is supplied from a central boiler-house situated in one of the car parks and designed in conjunction with the garages.

Assistant chief architect: L. W. Aked. Senior architect in charge: R. Gorbing.

## NEIGHBOURHOOD CENTRE: SWINDON

Frederick Gibbard

For the Park neighbourhood, of some 14,000 people, which is now under construction to the plans of the Borough Surveyor and Planning Officer and the Borough Architect. This is part of the expansion



200ft  
**SITE PLAN** Neighbourhood Centre: Swindon



## 2. PLANNING SCHEMES

programme under which Swindon is accommodating some 20,000 Londoners. The scheme has been approved and detailed design is progressing.

The neighbourhood centre is to have a built-up urban scale, in contrast to the rather open housing development. It consists of some forty-five shops, a community hall, library and other social buildings, including a public house. Associated with it is an area for service industry, a recreation area, a church and a primary school. It is designed as a pedestrian precinct, traffic being totally excluded from the shopping streets. The streets and other spaces are arranged on a closed cellular plan and the buildings are of 3 or 4 storeys with an 8-storey building as the hub. As the neighbourhood is some distance from the town centre, it was felt that it should have a central meeting place or square, which is made the focus of the design. All the precincts and ways lead directly into the square and the principal buildings face on to it. From whatever direction it is entered, the view is always closed by buildings; so that whilst there are views out of the square it is not possible to look through it from the outside. There are two narrow shopping streets or parades on the main axis north and south of the central square. So that motorists can get close to their destination there are numerous short cuts, at right angles to the main axis, to the parallel car parks on each side. Two of these short cuts are designed as minor shopping parades into the square. Secondary spaces are developed at the junctions between the cross streets and the main square, and the square itself is set back in front of the community hall.

The majority of the buildings over the shops are maisonettes and these are approached at first-floor level along what is, in effect, an upper-level pavement. This forms a continuous parade along one side of the precinct. Small 'service shops' (that is shops that provide a service such as a bootmender, oculist and photographer) are placed on the north end of the parade, linked with a café and the hall, which are on the first floor in the central square. Office accommodation is provided on the second floor, also overlooking the square. The first-floor parades are connected to each other by bridges, to give a sense of local enclosure, and are linked to the ground by flights of stairs and the internal stairs of the buildings. The centre is terminated at the south by placing a 4-storey maisonette block across the site. The ground-floor maisonettes in the centre of the block are omitted to give a way through to, and a view of, the school.

All the spaces are paved and provided with seats, flower boxes, sculpture and a fountain.

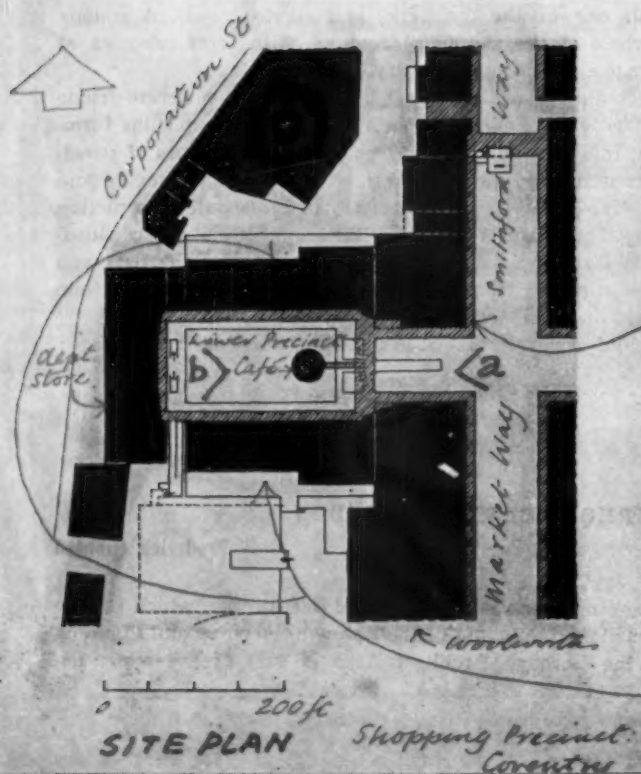
### SHOPPING PRECINCT: COVENTRY

Arthur Ling (City Architect)

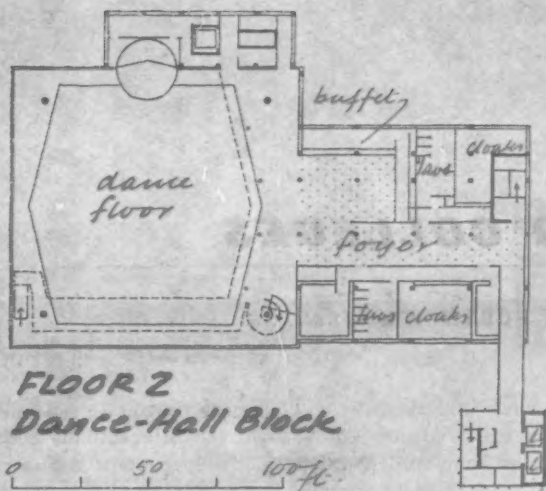
Known as the Lower Precinct, this is an extension of the completed Upper Precinct and will be similarly confined to pedestrian use only. It consists of five distinct projects, as follows.

1. **Dance-Hall Block**, the fourth 'pavilion' which will complete the main crossing between the precinct and Market Way. In order to gain as much lettable shop floor-space as possible on this valuable site, the dance hall itself is raised to the second and third floors, and main public access is by way of a bridge from a glazed staircase and lift tower which is placed within the cross-precinct. The walls of the dance hall are of brickwork. Since there is no need for daylight inside, they are solid apart from narrow slits which will form a decorative feature at night when they are lit from within. The blank walls will be embellished with a frieze of skeleton figures, representing the dance, made of wrought iron fixed about 9 in. from the wall surface, with neon tube at the back. The starting date is March, 1958.

- 2 & 3. **Link Blocks**. These two blocks form links between Wool-







worths and the dance-hall block, and a department store sited at the termination of the precinct. Each link block contains 20 shop units, 10 units on each of two shopping levels. There is a sharp drop of about 7 ft. in the natural ground level, which has been exploited so that the pavement level between Woolworths and the dance-hall block has the relationship of a mezzanine to the two shopping levels of the link blocks. Two ramps and four staircases connect the two shopping levels. The first link block is nearing completion; the other will be started during this year.

4. *Departmental Store.* This block will be 4 or 5 storeys high and will close the view down the axis of the precinct. Entrance again is on two levels. There is a public way under this block which connects the lower level of the precinct with Corporation Street. Starting date, some time in 1960.

5. *Café.* A circular structure, consisting of a reinforced concrete drum two storeys high containing the kitchen, wash-up and other service accommodation, and two reinforced concrete 'dishes' cantilevered around the drum to form the floor and roof of the café, which is glazed around its periphery. A turret on the roof contains the



View from *a* on Site Plan. heating and ventilating plant, etc. Access is by a bridge from the upper shopping level. Work started last October.

The floor of the precinct is paved with black granite setts divided by lines of grey slabs.

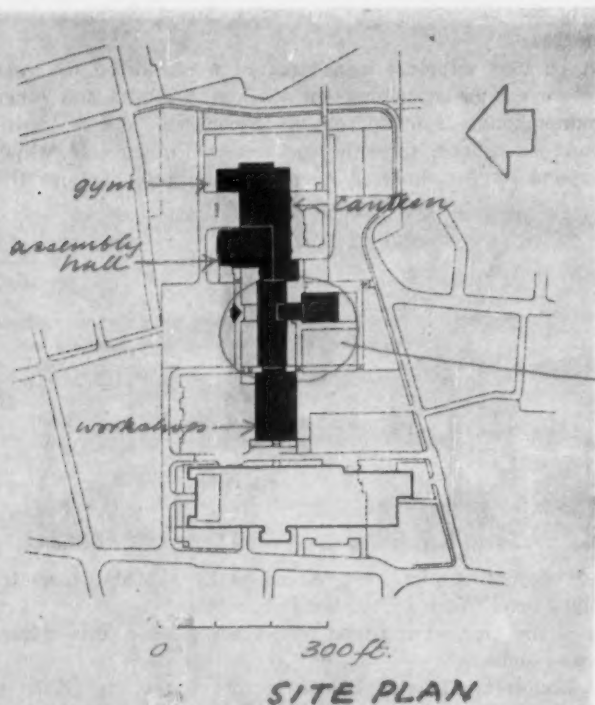
Principal architect: Douglas Beaton. Senior architects: Kenneth Bradley; William Pearson. Assistant architects: Richard Hindley; Gordon Youett.



Lower Precinct from *b* on Site Plan

# 3

## TECHNICAL AND OTHER COLLEGES



### COLLEGE OF FURTHER EDUCATION: IPSWICH

Johns, Slater and Haward

To serve Ipswich and the surrounding area and bring together departments now scattered through the town. It will eventually house 2,860 full- and part-time students. The main departments deal with engineering, building, science, commerce and social studies, women's subjects (principally domestic science) and art. The complete college is being built in three stages; the first of which, consisting of engineering and building workshops, was completed in 1952. The second stage, now under construction, includes additional single-storey workshops and arts and crafts studios, the main teaching accommodation in an 8-storey block (also containing administrative offices) and another single-storey block containing assembly-hall, gymnasium, canteen and kitchens. The final stage, which has not yet been approved, will contain a swimming-bath, a second gymnasium and additional accommodation for the art department.

The 8-storey block is T-shaped to minimize circulation space. Its layout is based on a planning grid of alternating 6 ft. and 4 ft. bays, which was found to provide the greatest number of economical room sizes. Interior columns are restricted to a single central line, with the corridor to one side of it, creating two different room depths (of 18 ft. and 24 ft.) suitable for standard classrooms and for practical rooms. Services run in a continuous vertical duct from which they spread horizontally within the spaces between floor-beams.

All blocks have a reinforced concrete structural frame. In the 8-storey block the perimeter frame is of 2-storey precast units consisting of mullions, perimeter beams and cills, except on the ground floor of the main elevation where there are open lattice-girders. The centre bay of each end wall is solid to act as a windbrace and is faced with brick. Elsewhere the frame is filled with timber window-wall units, with brick or wired glass panels below the cills. The assembly-hall has a folded slab roof. Infilling of the concrete frame of the assembly-hall block consists mainly of glazed screens and brick panels. The new workshop block has precast concrete columns and beams carrying triangular roof frames, which are glazed on the north slope and clad with light sheeting on the south.

Structural engineer: Felix J. Samuely. Electrical Engineers: Barlow Leslie and Coombes. Services engineers: J. Stinton, Janes and Partners.

### TECHNICAL COLLEGE: SCARBOROUGH

Gollins, Melvin, Ward and Partners

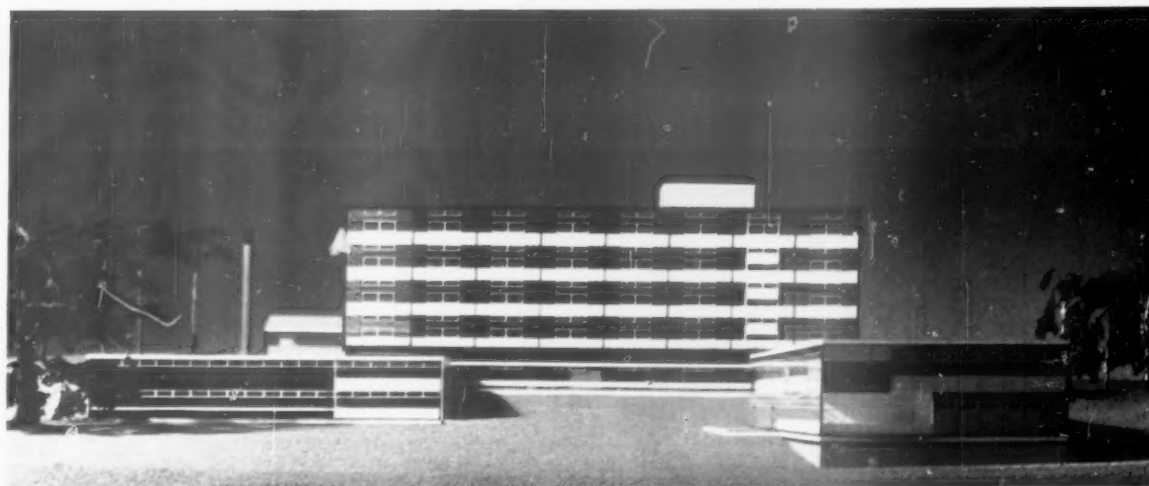
Sited north-west of the town, adjoining the Whitby road, in an area designated for education and hospital purposes. To the south is the Scarborough General Hospital, and to the west fine views of the Yorkshire moors. The college will be built in two stages: the first, approximately three-quarters of the whole, will accommodate 200 full-time students, 1,000 part-time day and evening students, and

[continued on page 21]

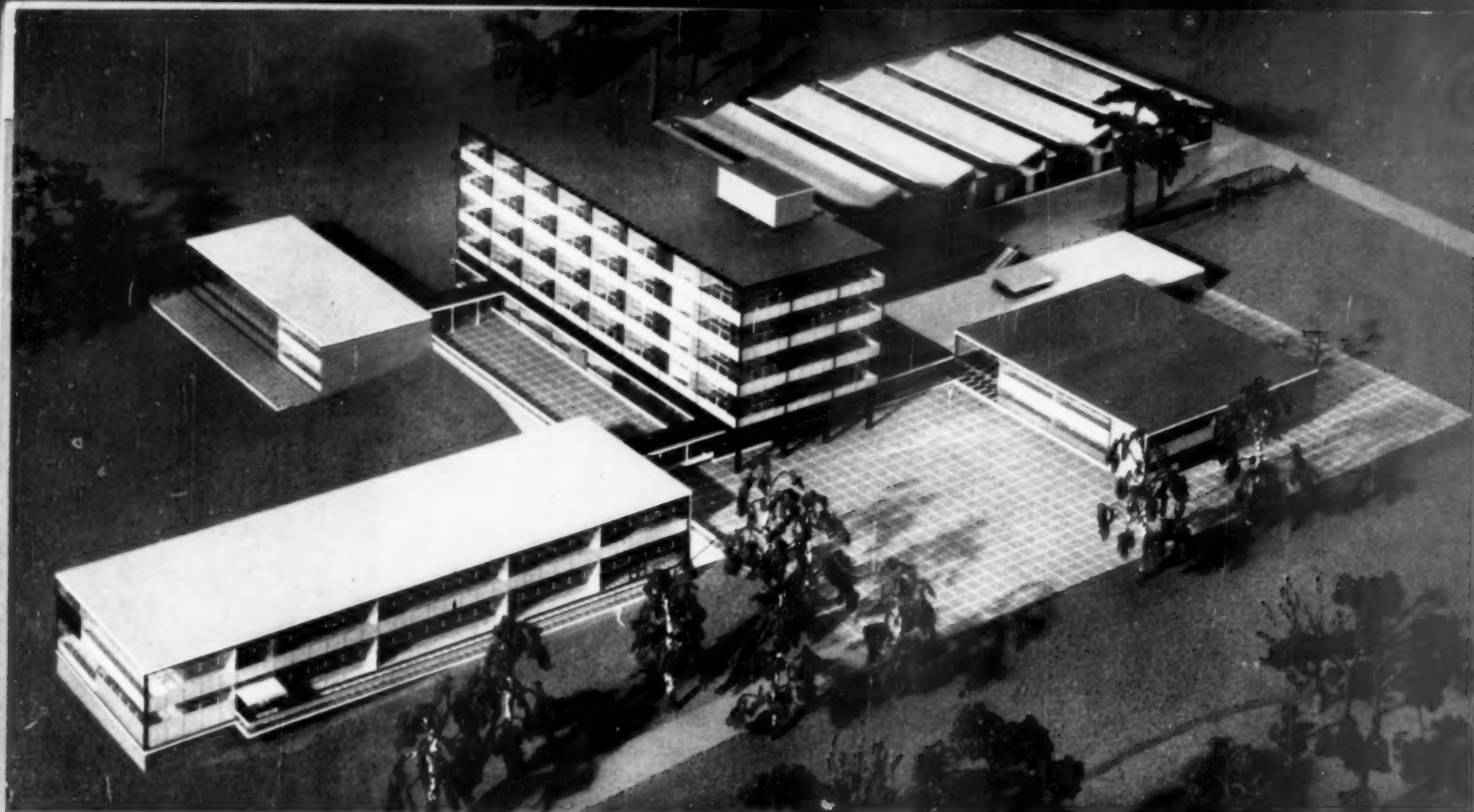


*Above, college of further education at Ipswich by Johns, Slater and Haward. On the left is the main teaching block; on the right the single-storey block, with a folded slab roof, containing assembly-hall, gymnasium, canteen and kitchens.*

*Right, Scarborough technical college by Gollins, Melvin, Ward and Partners: elevation from the east. See also next page and description and layout plan on following page.*







*Above, Scarborough technical college by Gollins, Melvin, Ward and Partners: from the north-east. The five-storey main teaching block is in the centre, with the other blocks containing workshops, gymnasium, assembly-hall, etc., connected to it at various levels according to the slope of the site. See also preceding page.*

### 3. TECHNICAL AND OTHER COLLEGES



*Right, Mansfield college of further education by D. E. E. Gibson (Notts County Architect): top, from the east, showing the six-storey teaching block, and, on the right, the assembly-hall and administrative block to which the gymnasium is attached; bottom, the whole scheme from the north showing also the existing classroom block (to which the new teaching block is connected by a bridge) and the extended workshops.*

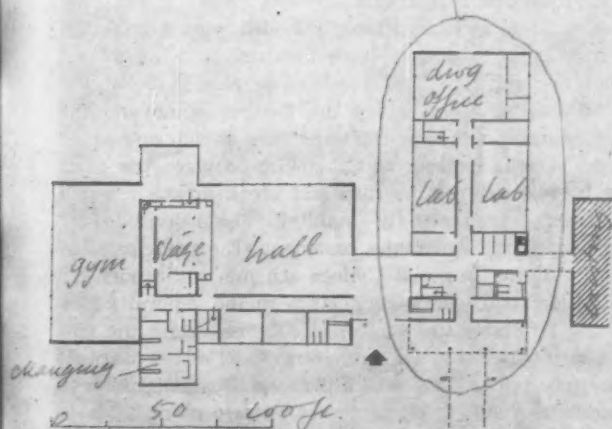
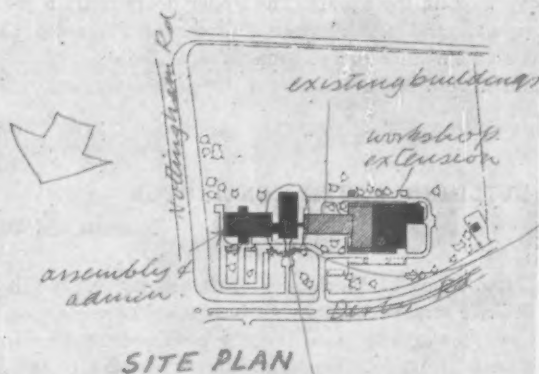
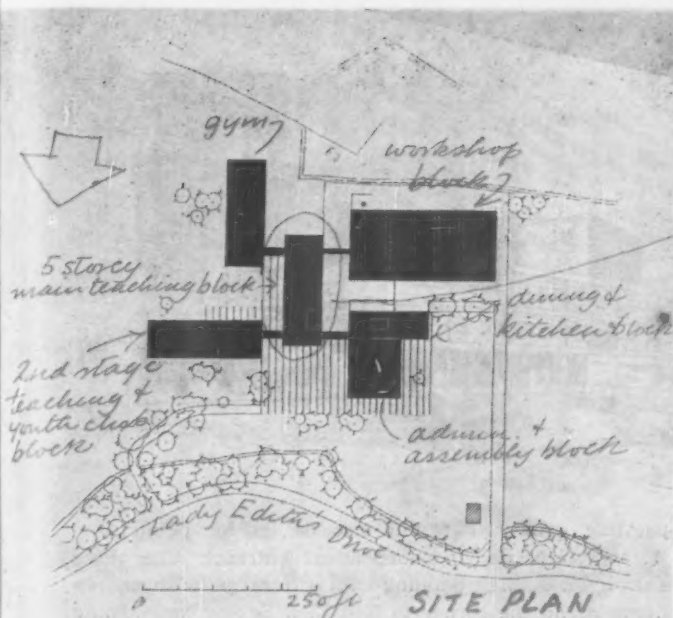


continued from page 18]

800 evening students. When the second stage is built, the day-load will be increased by about 100 students, and the evening load by about 200. The additional students will be predominantly women. The first stage will start early this year.

The teaching accommodation in the first stage is planned in two blocks: in the 5-storey block, which forms the centre of the plan, lie all the laboratories, classrooms, the library, and the students' common-rooms and cloakrooms; in the single-storey block lying at the back of the tall block and connected, owing to the levels of the site, by a bridge at first-floor level, are the workshops and stores. The gymnasium and changing rooms form another element connected by a covered way, as do the assembly hall, dining-room, administration block and, on the opposite side of the tall block, the future two-storey instalment. The main entrance is in the link between the tall block and the administration wing, enabling students, staff and visitors all to use it without creating problems of circulation.

The structural frame, floors, staircases and roof of the multi-storey building, which is enclosed by curtain walling, is of reinforced concrete. The workshops have an uncased structural steel frame, faced also with a light external wall.



**GROUND FLOOR**  
Main teaching block  
& Assembly Hall  
College of Further Education  
Mansfield

## COLLEGE OF FURTHER EDUCATION: MANSFIELD

D. E. E. Gibson (Nottinghamshire County Architect)

At the south side of the town, at the junction of Nottingham Road and Derby Road. It is being built in three stages, the first two of which, comprising laboratories, refectory and workshops, have already been built. Stage 3, illustrated here and at present under construction, forms the major part of the project and will be completed by the autumn of next year.

Accommodation consists of extensions to the workshop block, a main 6-storey teaching block, an assembly hall, a 2-storey administrative section and a gymnasium. The 6-storey block is connected to the existing building by a link bridge and, due to the slope on the site, the main pedestrian entrance runs over the entrance road on a bridge. The car park is at the front of the building.

The 6-storey block has a precast and in-situ concrete frame with prestressed floor units. The end walls are faced with brick and the two long sides consist of timber frames with metal windows and tile hanging under. The workshop block is steel framed and brick. The assembly hall and gymnasium are steel framed with timber frames, metal windows, hardwood panels and facing brickwork. Heating consists mainly of forced air convectors built between the double-skin corridor walls. All services, including wastes, are in the ceiling space and discharge into a main stack in the vertical duct.

Architect in charge: B. G. Walker. Quantity surveyor: F. Bailey.

## SCHOOL OF ARTS AND CRAFTS: LONDON

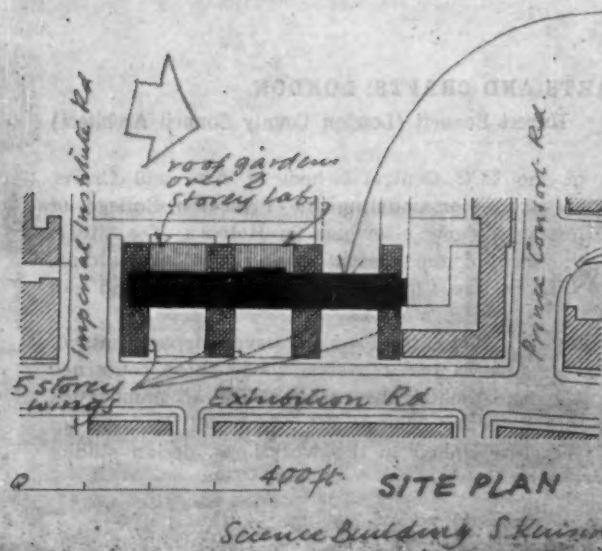
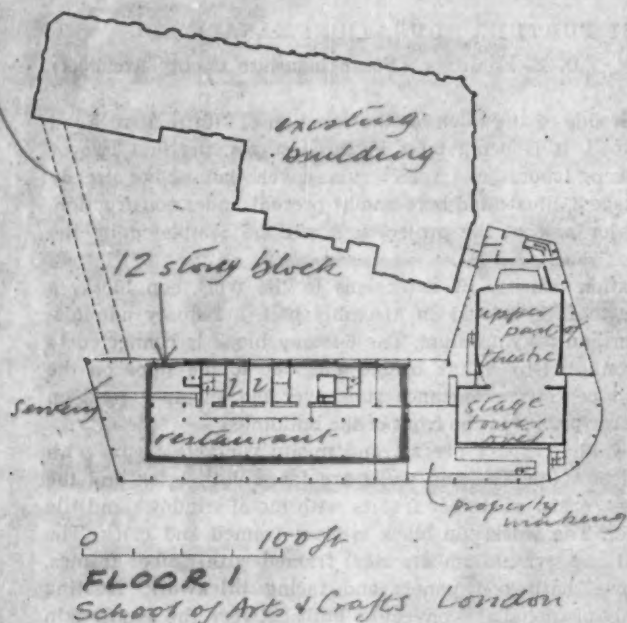
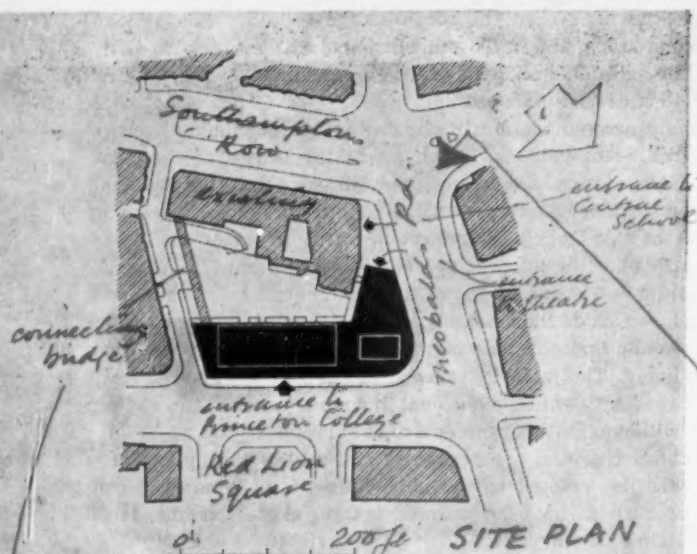
Hubert Bennett (London County Council Architect)

An extension of the LCC Central School of Arts and Crafts, Southampton Row, also accommodating the Princeton College of Languages and Commerce, now elsewhere in Holborn. The site is immediately to the east of the present Central School building, facing on to Red Lion Square. Construction has just begun and will take three years.

The new building will house three of the seven departments of the Central School, which is badly overcrowded: those concerned with textiles, pottery and theatre and costume. The accommodation for the last includes a theatre seating 380, which will be used for teaching and is therefore linked to the workshops, design studios



### 3. TECHNICAL AND OTHER COLLEGES



and scene-painting gallery, but will also be let for public performances. It therefore has an independent entrance. The three departments occupy a 3-storey building with a frontage to Theobald's Road, continuing round the corner to Red Lion Square and joining the main new 12-storey building which forms the new west side of the square. The new building is connected to the old by two enclosed bridges. There are car parks in the courtyard between the two and underneath the new building. On the first floor is a students' restaurant overlooking the square. The upper floors contain the classrooms, lecture-hall and administrative offices of Princeton College, which has its own entrance in Red Lion Square.

Construction is reinforced concrete with curtain-walling.

### SCIENCE BUILDING: SOUTH KENSINGTON

Norman and Dawbarn

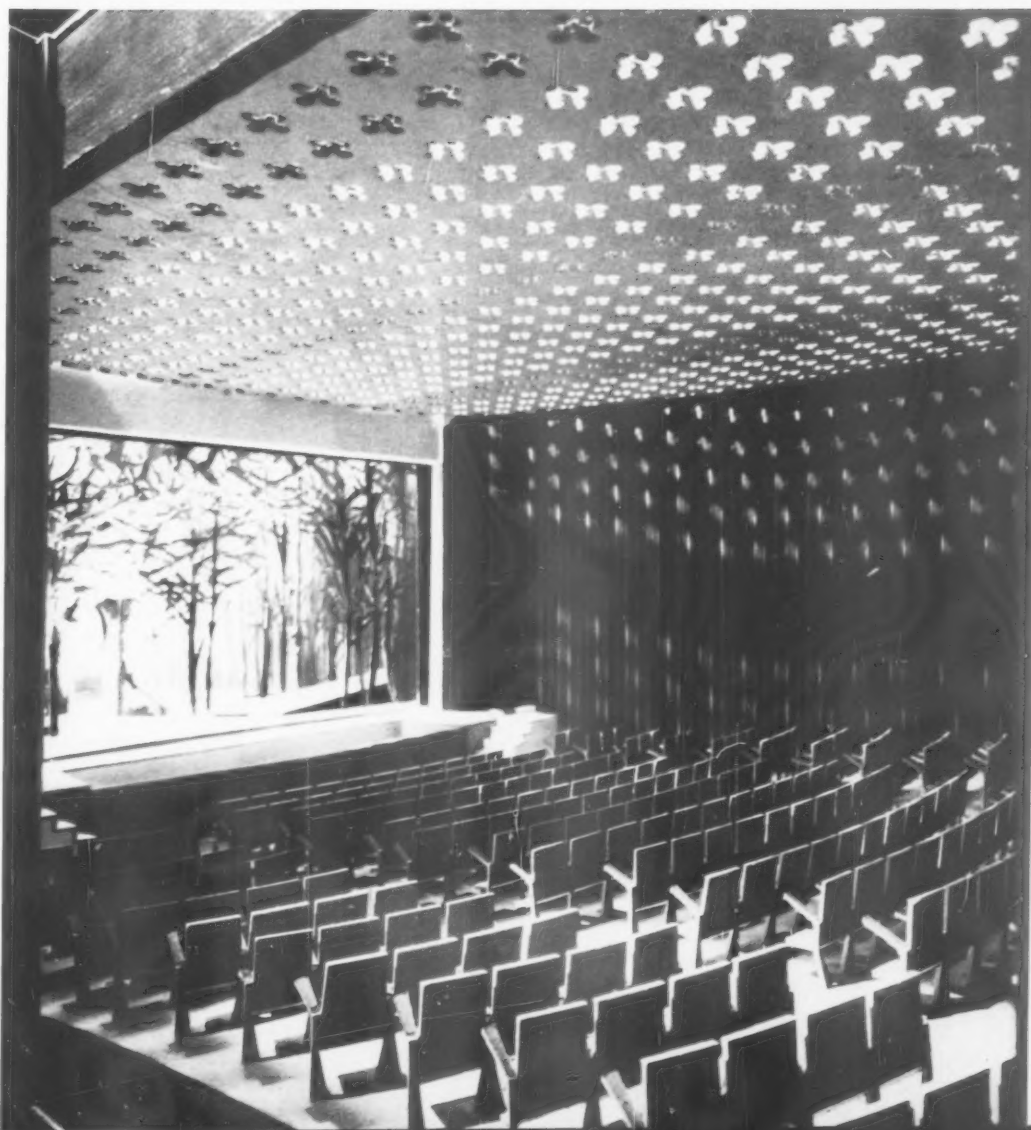
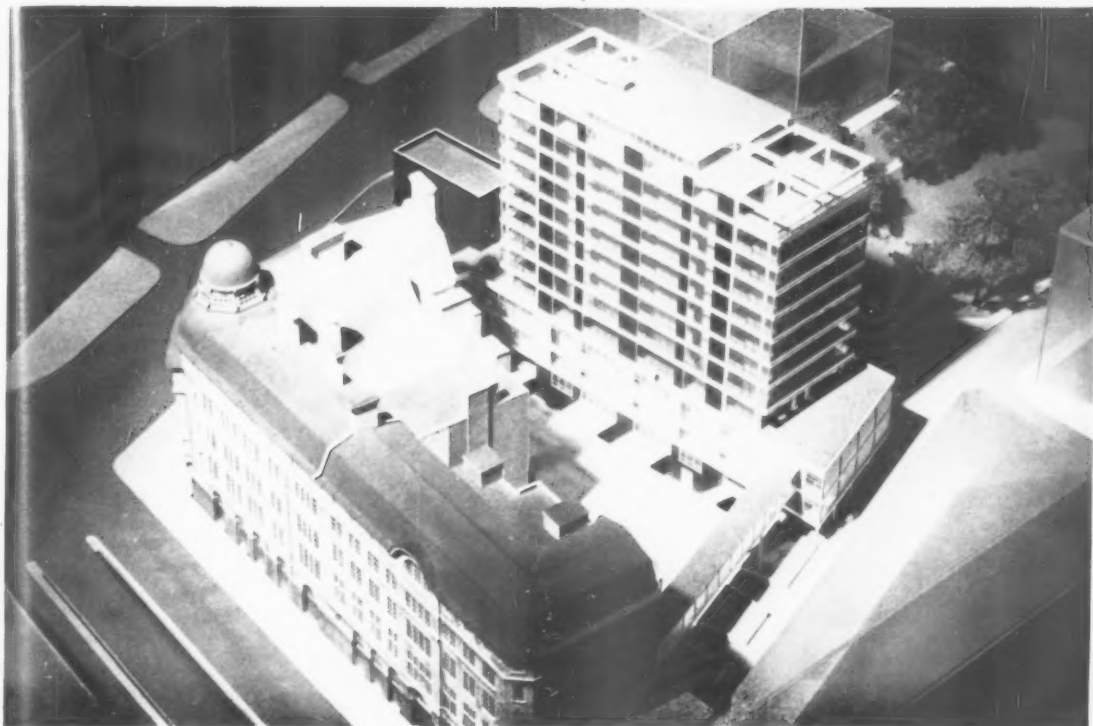
For the Department of Mechanical Engineering of the Imperial College of Science and Technology; a first stage of the expansion of the college on to the site now largely occupied by the Imperial Institute. To be built in four stages to allow the work of the department, which is at present housed on the site of the new building, to continue. The first stage will be completed in August next year; the other three will follow on at intervals.

Accommodation includes large and heavily-loaded workshops, large laboratories with medium loading, lecture theatres, drawing offices, library and small research and staff rooms. The plan-shape of the building, with the smaller rooms along the 9-storey spine and the larger in a series of lower wings at right-angles, was determined by the need for good natural lighting and the wish to place the parts of relatively small scale nearest the road and break up what would otherwise have been a long slab of building. The heavily-loaded laboratories and workshops are in the basement. The principal link with the remainder of the Imperial College scheme is the northern entrance in Exhibition road, which connects with the general pedestrian circulation 15 ft. above the vehicle circulation round the site. This entrance will be used by students from the Princes Gardens halls of residence (see pages 57-58) which it faces. Provision has been made for the addition, should it be necessary, of two more floors on the main block.

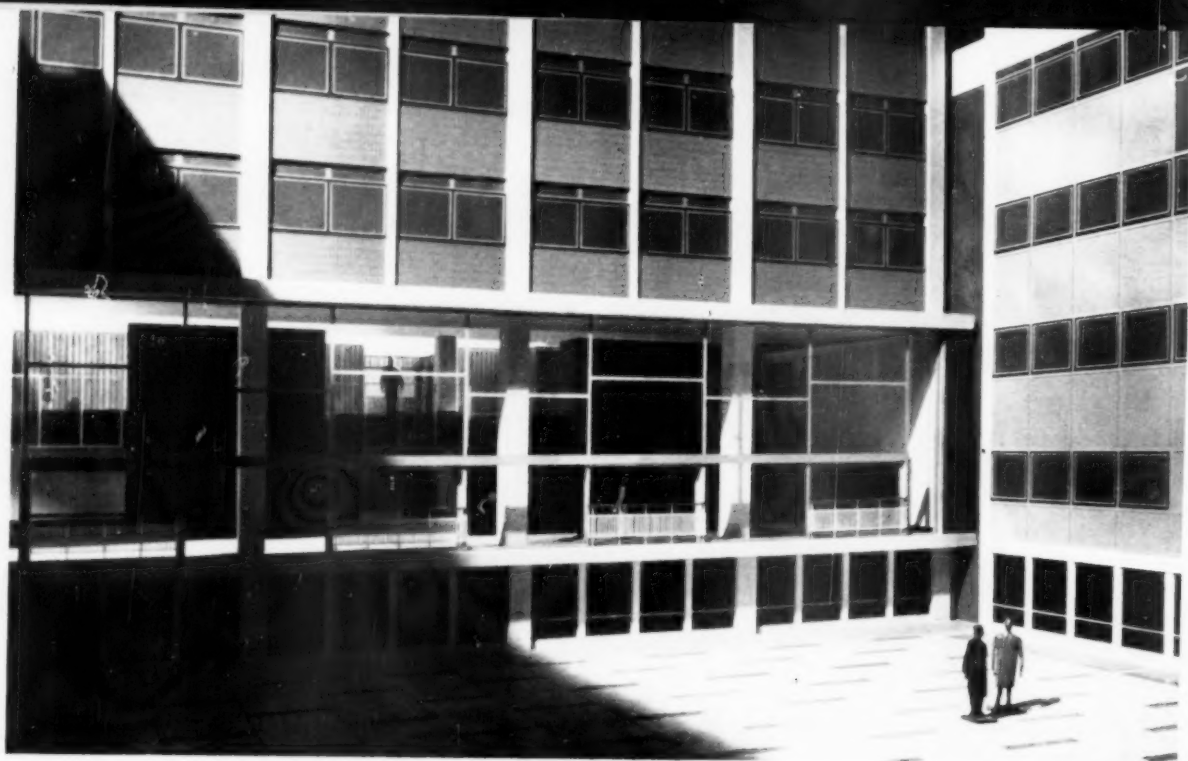
Structural frames are of steel and reinforced concrete, with reinforced concrete infill panels faced with tiles and a mosaic facing to the columns. Services run in a 5-ft. high duct between basement and the main concrete raft, from which rise a series of vertical ducts alongside the central corridor of the main block with

[continued on page 25]

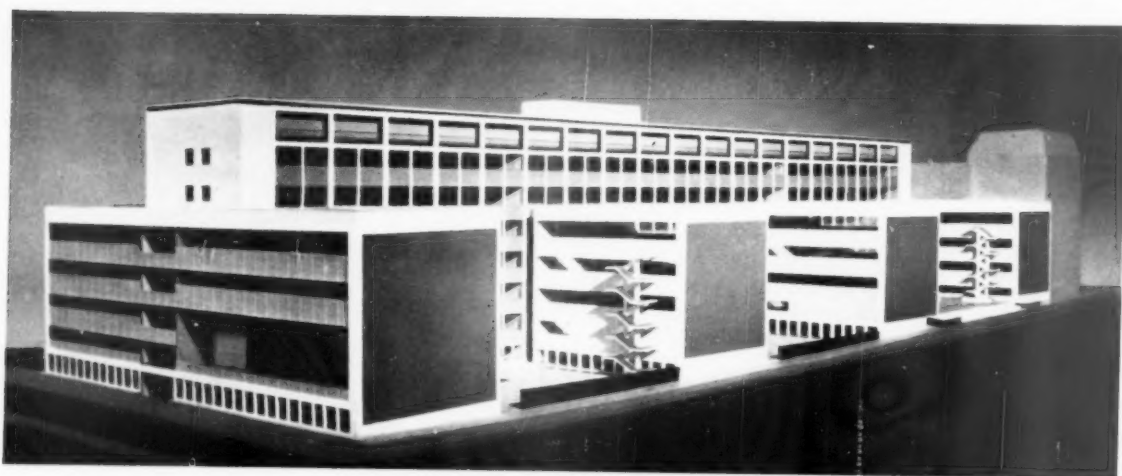




*New building for the Central School of Arts and Crafts and Princeton College, by the L.C.C. Architect's Department: top, from the direction of Southampton Row, looking over the present Central School building (by W. R. Lethaby) at the twelve-storey block, the upper floors of which house Princeton College and the far side of which forms the west side of Red Lion Square; bottom, interior of the theatre in the lower block at the corner of Theobalds Road, for the use of the theatre and costume department of the school and for public performances.*



*Science building at South Kensington, by Norman & Dawbarn: below, showing the layout of the building with a nine-storey spine and lower wings at right-angles enclosing paved courts; left, the lower part of the facade of the spine building from inside one of the courts. It has still to be decided whether the external stairs shown may not be put inside.*



*Below, Southgate technical college by the Middlesex County Architect. The main teaching block is in the background with the assembly-hall block in front of it and the workshops on the right.*

### 3. TECHNICAL AND OTHER COLLEGES



continued from page 22]

horizontal ducts above corridors at each level. The entire top floor is used for water-storage and electrical and ventilation plant.

## TECHNICAL COLLEGE: SOUTHGATE

C. G. Stillman (Middlesex County Architect)

In the grounds of a derelict mansion which is to be demolished. It houses departments of mechanical and electrical engineering, science, commerce and domestic economy, and also provides a library, dining-room and hall (to serve also as a public hall) and a gymnasium. A youth employment bureau is housed within the college and a corner of the site adjoining the High Street has been reserved for a future county branch library. Work is expected to begin late next year.

In the main central 5-storey teaching block administration, library, youth employment bureau and common-rooms occupy the ground and part of the first floors. A single-storey hall and dining block is attached, and a covered way leads to the gymnasium and workshop blocks. The latter is mainly single storey with 2-storey 'heavy' laboratories ranged along its length. Car and cycle parks open off the internal road system. A separate service entry and yard are provided from a cul-de-sac, with caretaker-lodge adjacent.

The main block has an in-situ concrete frame and slabs, cladding above ground floor being full-height curtain-walling between exposed columns at 11 ft. centres. Part of the workshop block is similar, but it has a steel roof frame and patent glazing over the single-storey portion. Lower storeys and end features are faced in brick.

Group architect: G. F. Holden. Assistant architect: C. W. Pearce. Structural engineers: Taylor, Whalley and Spyra. Mechanical services engineers: Harding, McDermott and Partners.

## COLLEGE OF FURTHER EDUCATION: WELWYN

Louis de Soissons, Peacock, Hodges and Robertson

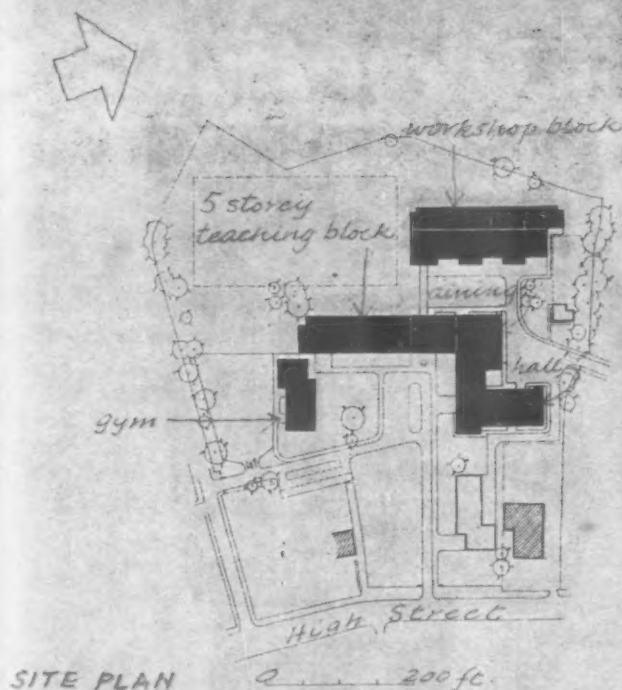
Planned round a quadrangle on a site containing good trees, as many as possible of which are retained. No starting date is yet fixed.

The main 4-storey block consists of the normal classrooms plus special rooms for chemistry, biology, domestic science, dressmaking, book-keeping, geography, etc., and tutorial rooms, prep. rooms, stores, etc. A single-storey block at the north end contains pottery room,

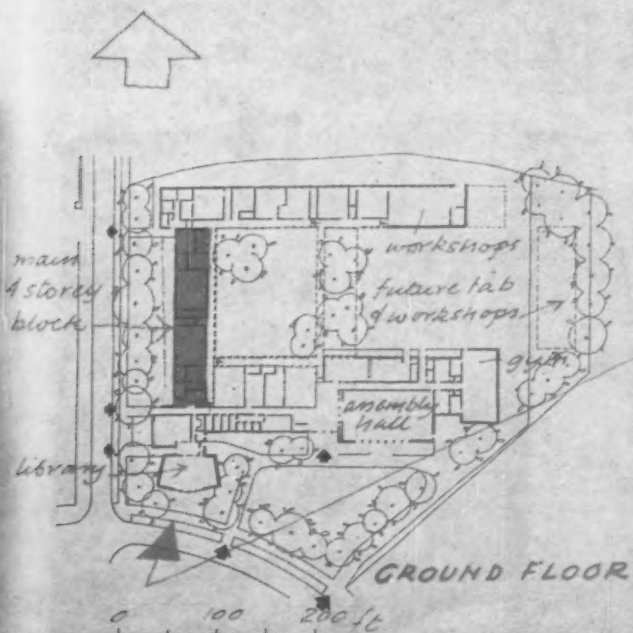


drawing office, the physics, radio, electrical and mechanical engineering departments and a large workshop of 3,000 sq. ft. The south wing contains a youth employment centre, the college administration, staff and students' common-rooms, an assembly hall to seat 600, dining-room, kitchen, etc. At the end of this wing is the gymnasium with changing-rooms etc., which can also be used as dressing-rooms for stage performances. At the south-west corner of the site is the county branch library, attached to which is the college reference library, accessible both from the county library and the first floor of the 4-storey block.

The building has a reinforced concrete frame with steel floor beams and concrete floors. External brick walls either as infill or load bearing. Roofs are copper. Windows have sawn slate infill below.



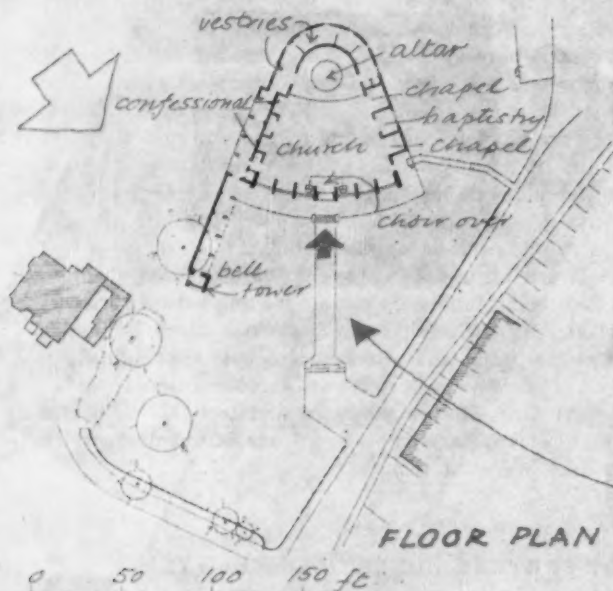
SITE PLAN



GROUND FLOOR



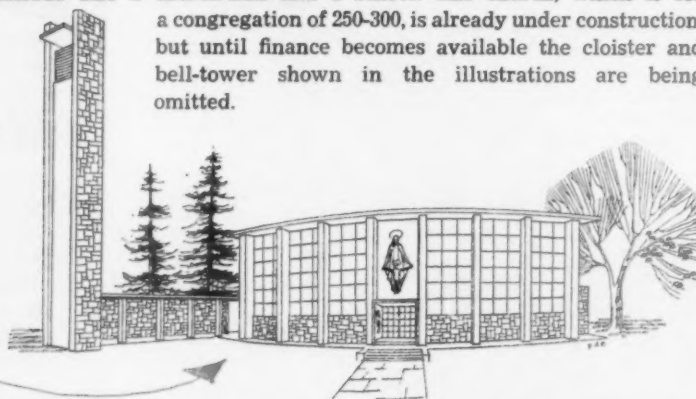
# 4 CHURCHES



## ROMAN CATHOLIC CHURCH: MIDHURST

Guy Morgan and Partners

Part of a future comprehensive Roman Catholic centre which will include also a church-hall and a school. The church, which is for a congregation of 250-300, is already under construction, but until finance becomes available the cloister and bell-tower shown in the illustrations are being omitted.



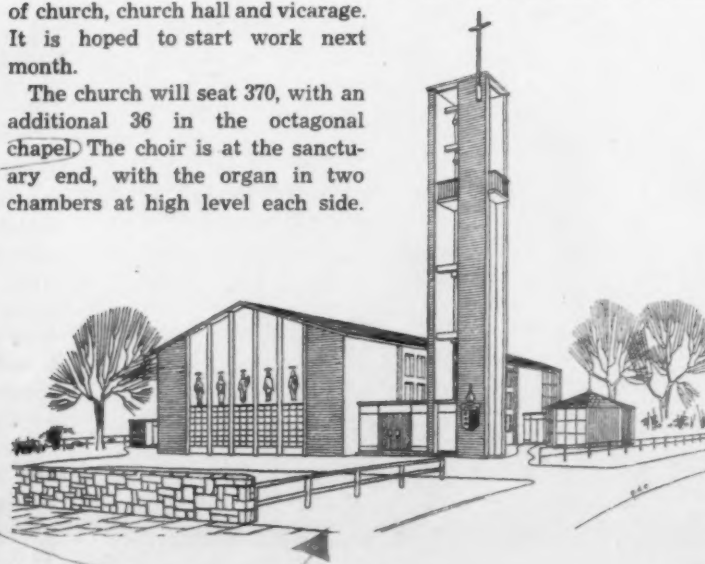
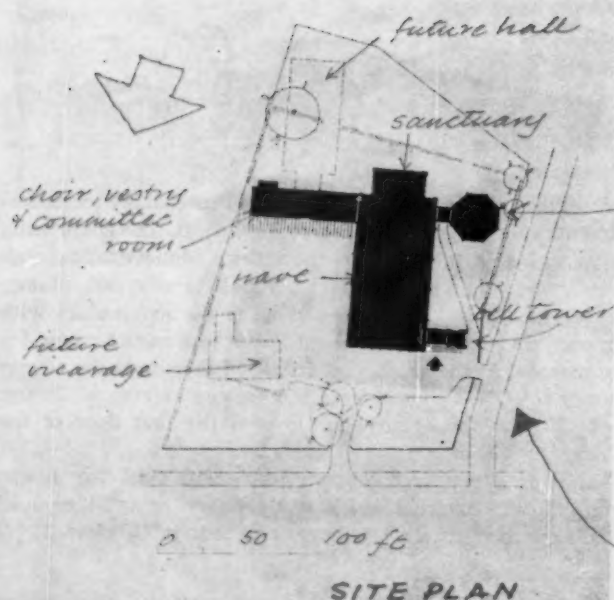
External walls are of random Sussex sandstone backed with London stock bricks. The flat roof is steel framed with stepped plywood suspended ceiling. Heating is by an under-floor off-peak electrical installation.

## CHURCH: RUBERY, NEAR BIRMINGHAM

Lavender, Twentyman and Percy

The church (of St. Chad) is on the site of an existing smaller one. A timber church hall, also on the site, is to remain for the present, but the church is designed as part of an eventual group consisting of church, church hall and vicarage. It is hoped to start work next month.

The church will seat 370, with an additional 36 in the octagonal chapel. The choir is at the sanctuary end, with the organ in two chambers at high level each side.



Construction consists of reinforced concrete piers supporting a folded slab roof. The tower is supported by three concrete fins. The chapel has a concrete roof on load-bearing brick walls, and the vestry block a timber roof on load-bearing brick walls. The nave window walls consist of non-load-bearing precast concrete blocks, pierced with chamfered openings for the windows. These have teak surrounds in a grid of stone mullions and transomes. Other walls are faced with brick and black slate. Roofs are covered with copper. Five pieces of metal sculpture are proposed on the elevation facing the main road.

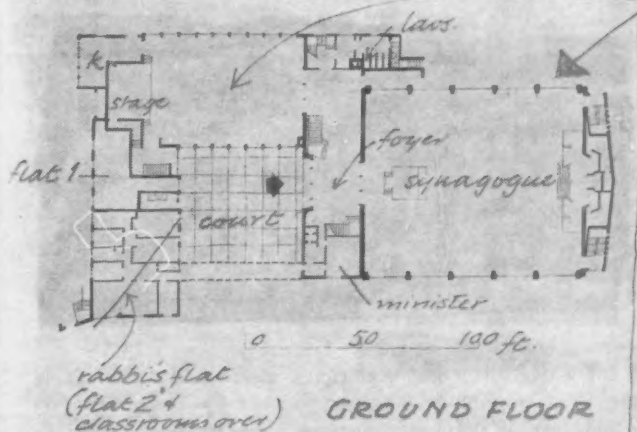
#### SYNAGOGUE: ST. JOHN'S WOOD

T. P. Bennett and Son

In Grove End Road. The scheme includes a synagogue, an entrance foyer, Guild rooms, Ministers' rooms and a school building with classrooms and a large assembly hall underneath it. The latter has a stage. There is also a 3-storey block containing flats for the Ministers and officers of the synagogue and school. The first section, comprising the classrooms, hall and main foyer, with basement boiler-house, plant rooms, fuel stores and cloaks space, is already under construction.

The main construction is a reinforced concrete frame with stone, artificial stone, and brick cladding, with decorative panel infill. The apron between the classroom windows and the hall windows is treated with mosaic, while a decorative wrought iron grille is proposed for the arched opening between the foyer and the synagogue proper. Roofs, throughout, whether pitched or vaulted, are to be covered with sheet copper, and the whole building, excepting the flats which are treated independently, has a plenum system of ventilation and heating.

Quantity surveyors: Gardiner and Theobald.



# 5

## UNIVERSITY BUILDINGS

### CHEMISTRY BUILDING: LEICESTER

Architects' Co-Partnership (in association with J. L. Martin)

The first building of a programme of development on a new site adjoining the existing university buildings. The layout plan for the development is by Professor J. L. Martin. The building consists of two separate blocks. The first, which principally contains teaching laboratories, has just started; the second, containing research laboratories, will follow later. A link between the blocks contains service rooms used principally by the research laboratories.

The two upper floors of the teaching block contain laboratories for general and physical chemistry, providing 350 places, together with storage, balance-rooms and other ancillaries. The ground floor contains the entrance hall, the radio chemistry laboratory, professors' and administrative offices, the library and three lecture rooms which, with the addition of one lecture room on the floor below, provide 260 places. The lower ground floor contains central stores, workshops and cloakrooms, and accommodation for a central boiler plant and oil fuel tanks to serve the whole of the future development on the site. Ventilation machinery and water storage are in a plant chamber on the roof. The research block is on two floors and provides 75 laboratory places for readers, lecturers, research fellows and research students.

The reinforced concrete frame is on a 20-ft. structural grid with an in-situ flat slab and columns, and edge-beams faced externally with vitreous mosaic. Windows are aluminium in hardwood subframes. Heating generally is from ceiling panels. Services provided are boosted cold water, hot water, town gas, electricity, steam and waste. Their provision has been simplified as far as possible by accommodating them above floor level in perimeter ducts with direct feeds to peninsular benches. Vertical services are accommodated in two main ducts adjacent to the staircases.

Consulting structural engineers: Ove Arup and Partners.

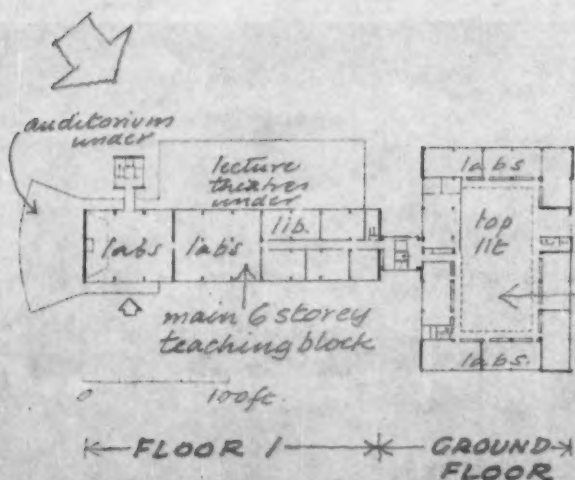
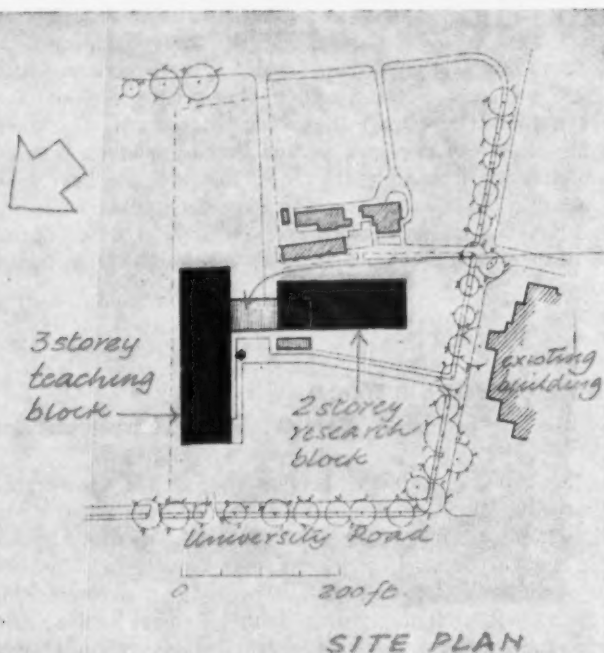
### PHYSICS BUILDING: NEWCASTLE

Basil Spence and Partners

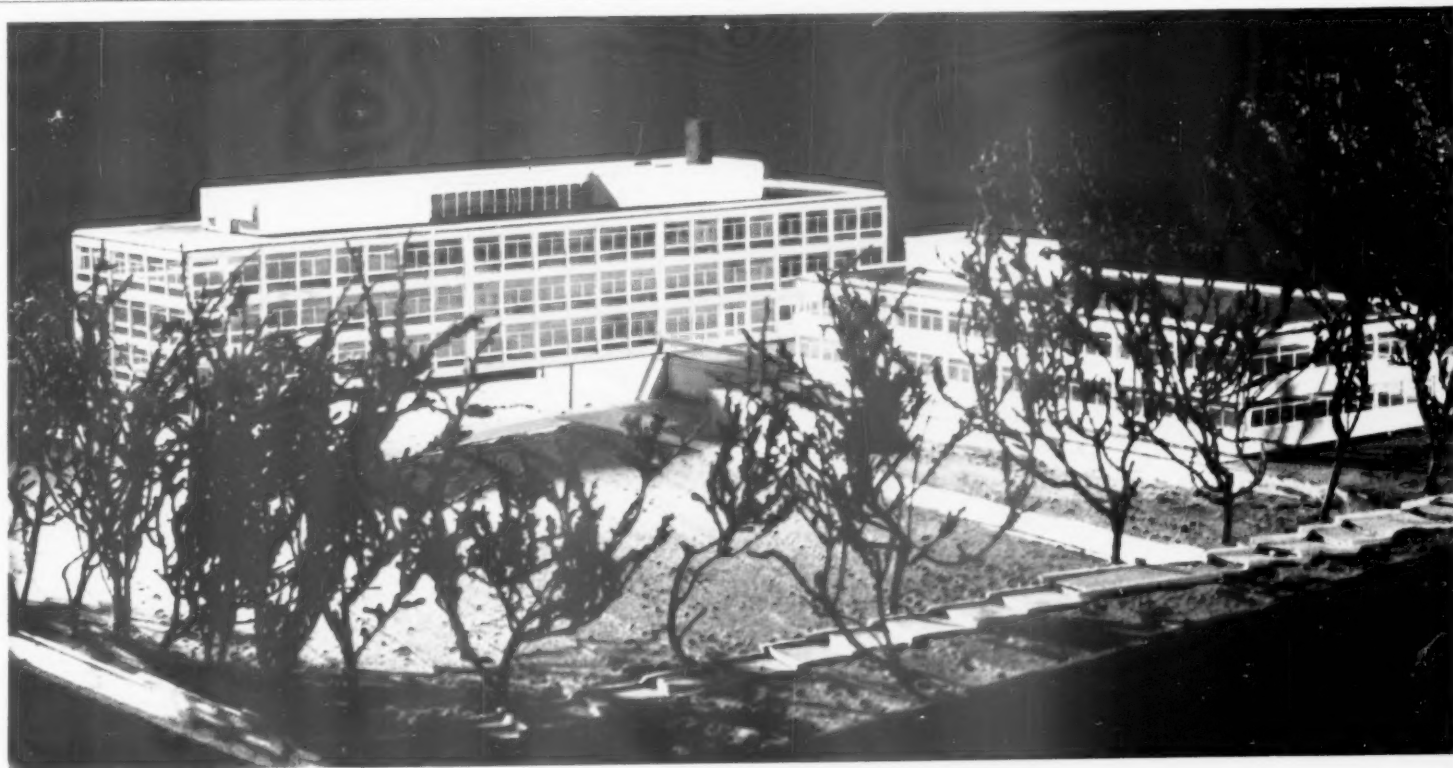
For Durham University. On the steeply sloping site between the Haymarket and College Avenue at present occupied by the Corporation tram and bus depot, and including Nixon Place. The building comprises a main 6-storey teaching block linked by a service stairway and lift well to a 3-storey and basement research block. Work on the site began late last year and will take from three to four years to complete.

A fully equipped auditorium to seat 360, wedge-shaped in plan, projects from the south gable of the teaching block at the lower end of the site. There are three other main lecture theatres, one of which seats 260 and the other two 150 each. A library, common-rooms, and administrative offices are also provided in the teaching block, which

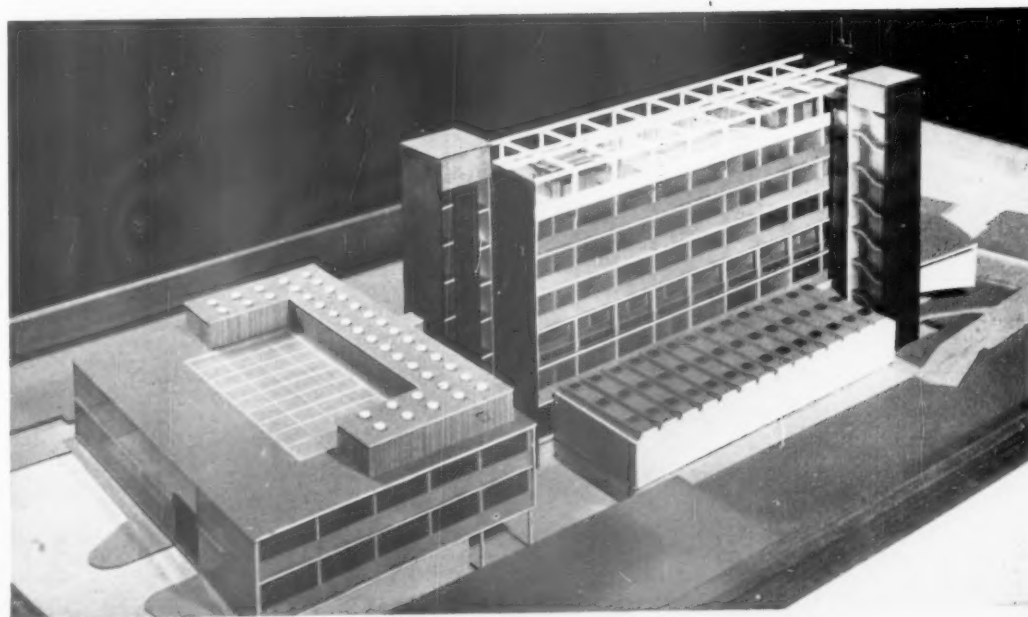
[continued on page 31]



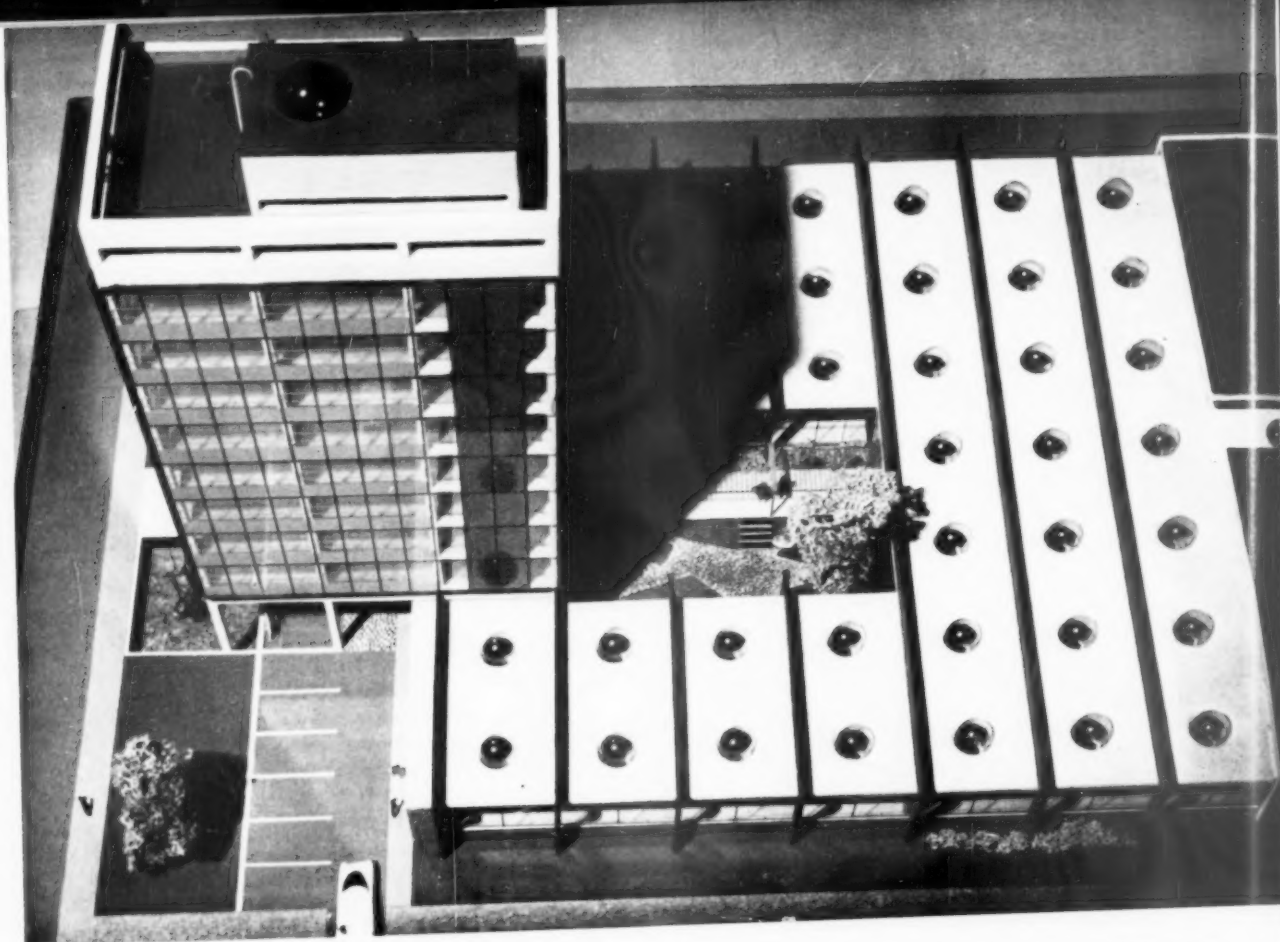




*Above, chemistry building, Leicester University, by the Architects' Co-Partnership; the teaching block with the two-storey research block on the right.*



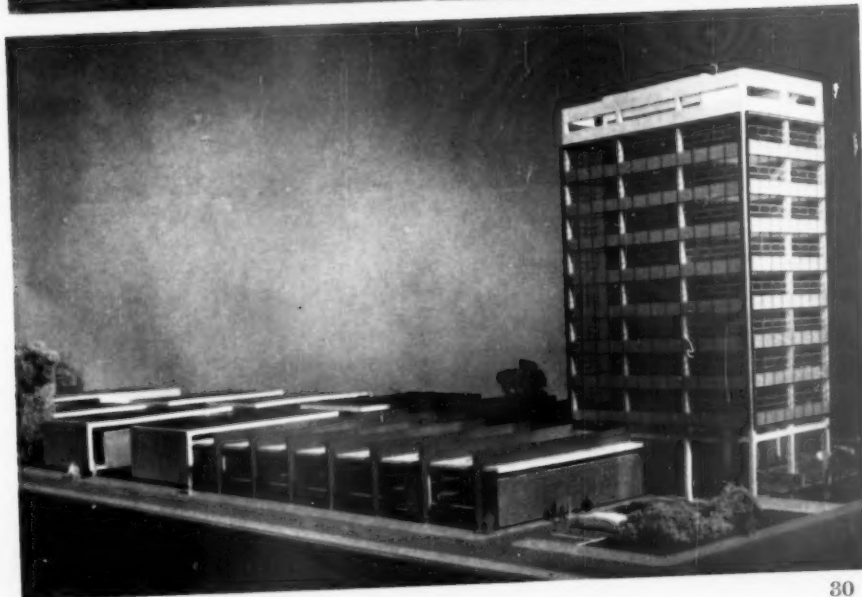
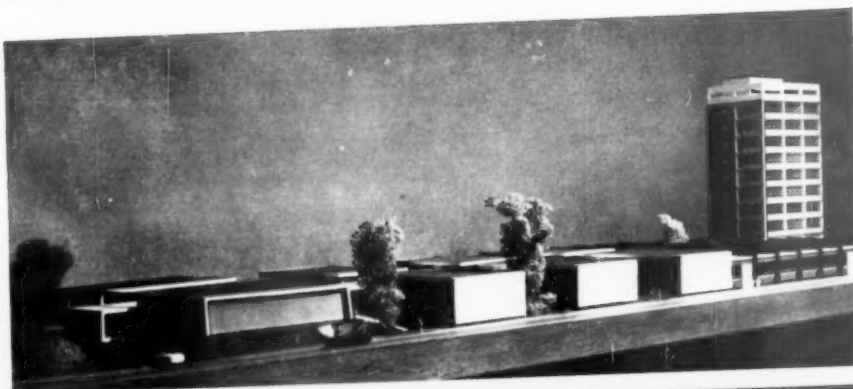
*Right, physics building at Newcastle for Durham University, by Basil Spence and Partners. On the left is the research block with its top-lit central hall; on the right the six-storey teaching block. The auditorium attached to the far end of the latter can just be seen.*



## 5. UNIVERSITY BUILDINGS



*Physics building, Liverpool University, by Basil Spence and Partners: top, looking down on the roofs of the laboratories, showing the garden courtyard at the foot of the nine-storey tower; right, the range of single-storey lecture-theatres and laboratories, terminating in the tower, from either end; above, the tower at night.*



continued from page 28]

is entered from the east side. The research block, which is likely to be built as a second phase of the scheme, consists of a large central hall two storeys high, surrounded by sixteen standard research rooms on two floors, some of which are sub-divided into two smaller rooms. The central hall has a glass roof, and a floor capable of taking the heaviest loadings for experimental equipment. In this block also are an anechoic chamber for experiments in acoustics, workshops and stores.

The building has a reinforced concrete frame capable of carrying an additional floor, and on the high block this frame will be constructed in the first stage to contain visually the pent-house accommodation on the roof, which includes staff rooms, caretaker's flat, and tankage, etc. Probable finishing materials are dark Welsh slate for the main gables and riven green Westmorland slate for the horizontal sweep of the curved auditorium gable. Elsewhere buff Welsh brick to match those already in use in the University is used, and the side faces are infilled with black metal window frames containing white framed opening lights and blue-grey mosaic-faced precast concrete spandrel panels.

### PHYSICS BUILDING: LIVERPOOL

Basil Spence and Partners

In the university area, adjoining the school of architecture. The site was previously covered by slum dwellings and several streets have been closed in the replanning. Work began last August and will be finished towards the end of next year.

The building provides lecture theatres, teaching and research laboratories, classrooms and staff rooms, in a range of single-storey buildings except for the staff rooms, classrooms and some of the smaller teaching laboratories which are in a 9-storey tower, placed at one corner of the plan with a small courtyard at its base. The block of lecture theatres contains three auditoria, two on one side and one on the other side of a service area. The students' entrance, with a glass-walled hall, is between these theatres and the main teaching laboratories, of which there are six large and four small. There is a separate sunk boiler-house.

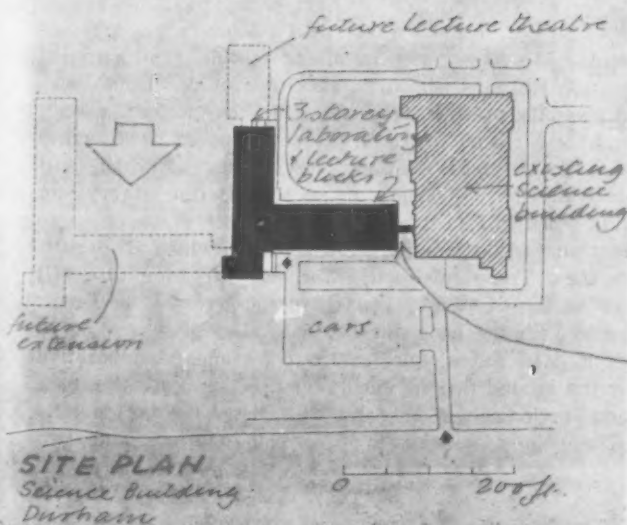
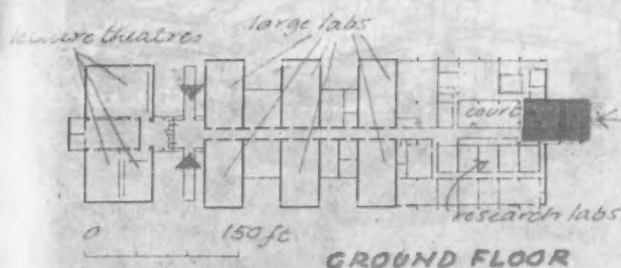
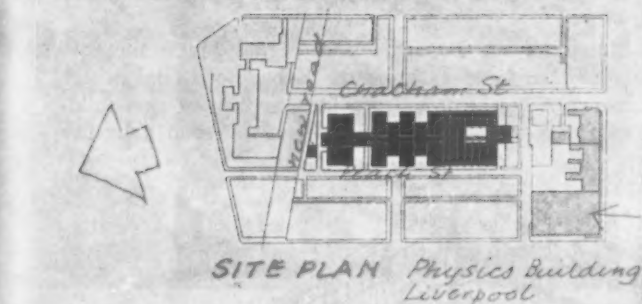
The lecture-theatre block is of reinforced concrete with a roof of prestressed beams spanning the length of the building. The flank walls are faced with Derbydene marble and the end walls with glass mosaic. The theatre walls are lined with timber. The teaching laboratories are in load-bearing brick with roofs of woodwool slabs carried on lattice-steel beams. The end walls are faced with Derbydene marble and the side walls with grey-brown facing bricks carried through to form the inner walls of the smaller laboratories. These have glass mosaic panels beneath the windows. The research laboratories are reinforced concrete with grey-brown brickwork below the windows and a south wall of re-used granite setts. The tower has a reinforced concrete frame with columns at 20 ft. centres clad with precast panels faced with glass mosaic. The exposed frame and roof structure are bush-hammered.

### SCIENCE BUILDING: DURHAM

Easton and Robertson

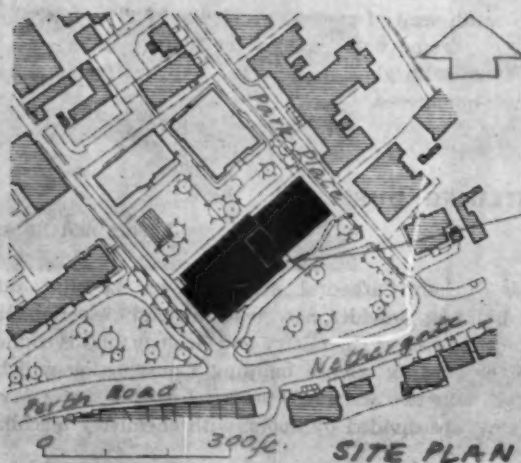
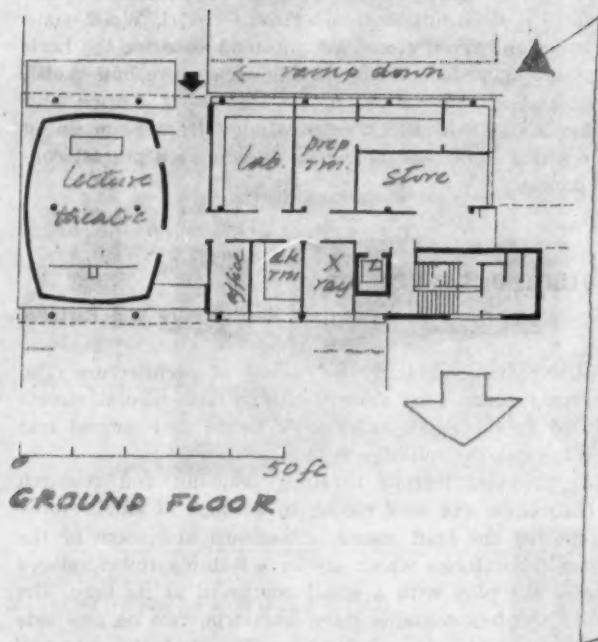
The site faces Durham Cathedral and Castle on the other side of the river. The building provides new teaching and research laboratories for the Departments of Chemistry and Geology, and is connected by a bridge to the existing science building. Construction will begin next July and will take two and a half years.

The departments are divided by floors, with chemistry teaching on





## 5. UNIVERSITY BUILDINGS



the ground floor, chemistry honours and research on the second, and geology on the third floor. The elevations are designed for flexible partition spacing on a 4 ft. 6 in. module, and to give the maximum daylighting to the laboratories. Distribution of equipment is by lift from a central store to the various departments.

The building has a steel frame, with stanchions at 18 ft. centres, carrying hollow-pot floors spanning both ways.

Engineers: R. T. James and Partners. Consulting engineers: A. H. Barker and Partners. Quantity Surveyors: Hamilton H. Turner and Son.

### METALLURGY BUILDING: OXFORD

Basil Ward (of Ramsey, Murray, White and Ward)

The new building for the Department of Metallurgy is the first within the general plan for developing the Keble Road triangle for university purposes. Accommodation provided in the 3-storey building includes laboratories, research rooms, workshops and a lecture



theatre and is designed to meet both the requirements of the present department and possible future needs. Construction is just about to start.

The structure is reinforced concrete with solid reinforced concrete floor slabs. External infilling is of light-weight construction comprising insulation blocks clad with facing panels, between continuous strip windows.

Architect in charge: George P. Buzuk.

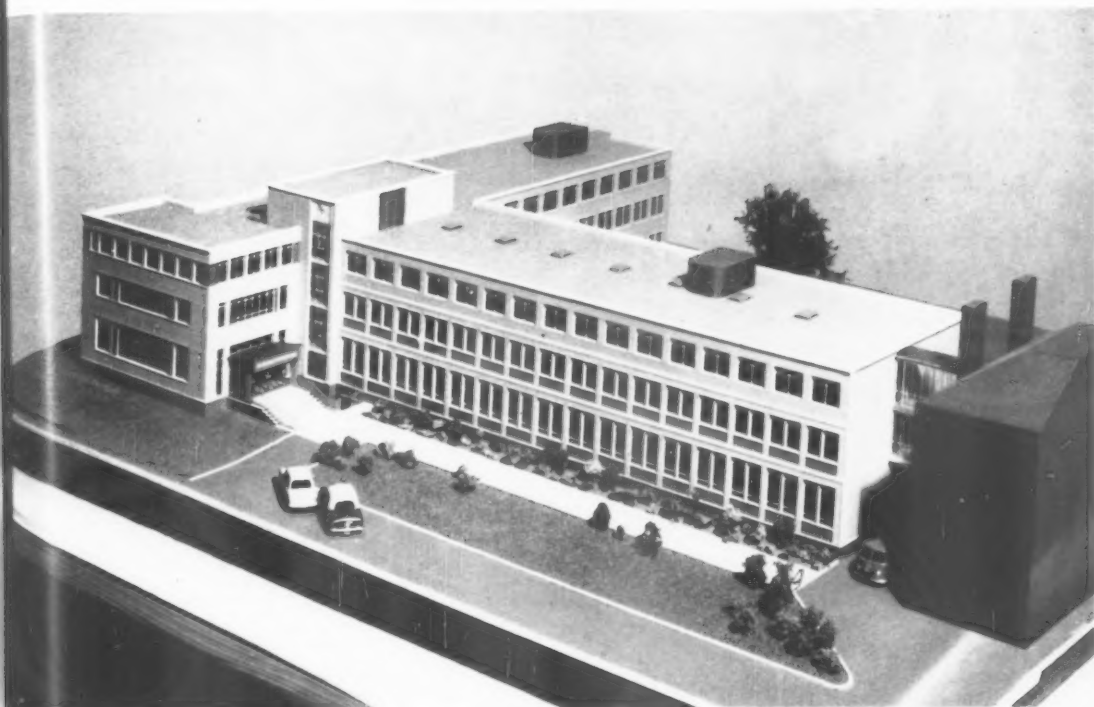
### LIBRARY, HALL, ETC.: DUNDEE

Robert Matthew and Johnson-Marshall

For Queen's College: a library for 134,358 books, a college hall seating 850 and a 12-storey tower containing teaching and administrative accommodation, all designed to present a unified frontage to the existing university precinct. The site, which overlooks the main Perth road and the Firth of Tay, is at present occupied by a terrace of converted Regency and Victorian houses, some of which will remain in use while the first stages of the scheme (the library and tower) are built. Work will start this spring.

The main entrances lead to a central foyer from which all departments are reached. There is also a lower entrance (due to a fall in the ground) at the east end, allowing direct access at basement level to the main library book-stack, which is to be accessible to students. Library staff rooms, two lecture-rooms and administrative offices occupy the ground floor of the library section, with the main reading room, periodical room and librarians' room on the first floor. There is a gallery to the reading room and two

[continued on page 85]



*Left, science building for Durham University by Easton and Robertson, showing on the right the connection by bridge to the existing science building.*

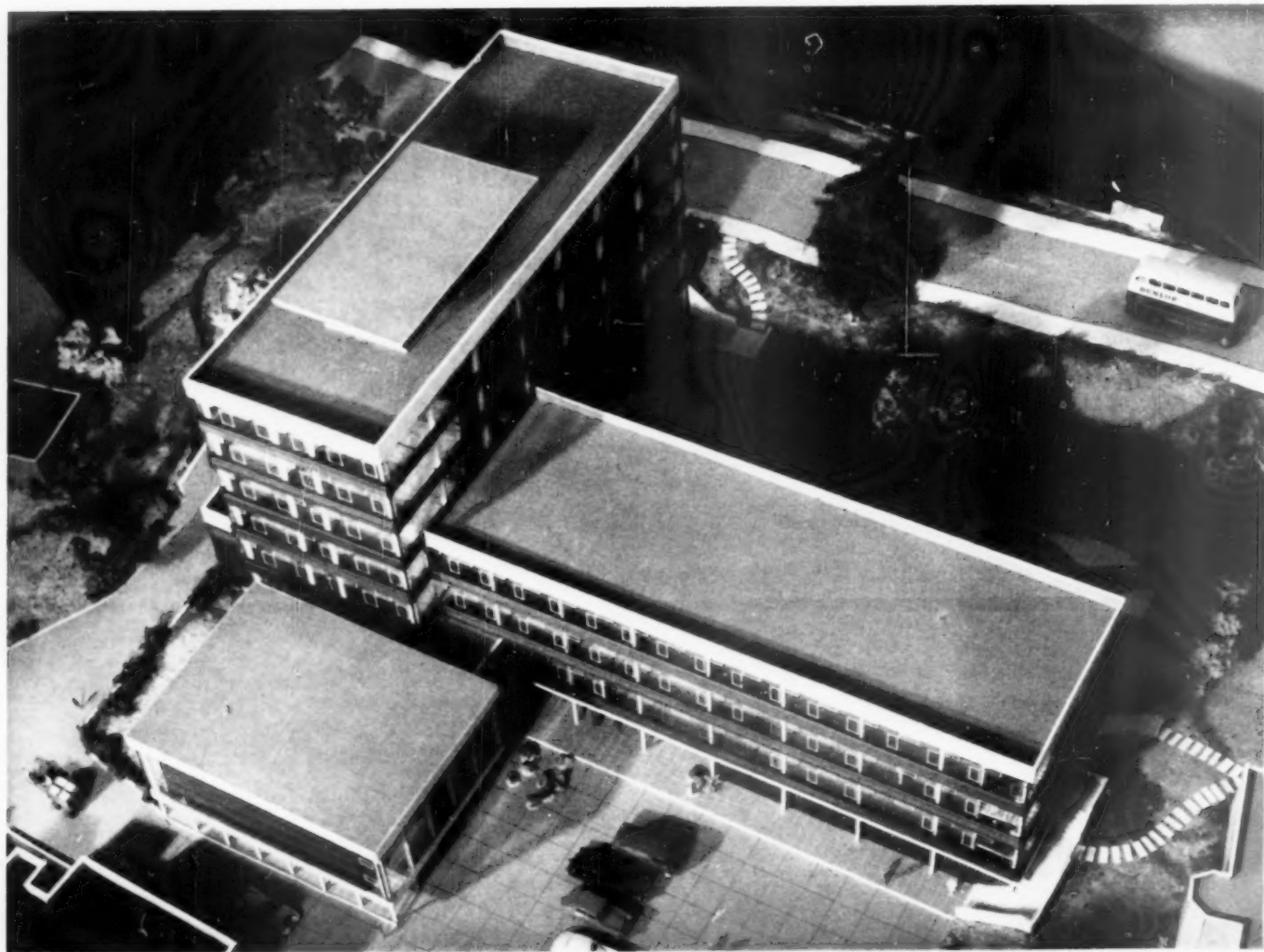
*Below, buildings for Queen's College, Dundee, by Robert Matthew and Johnson-Marshall. The tower, placed between the hall and library wings, contains offices and teaching accommodation with staff rooms at the top.*



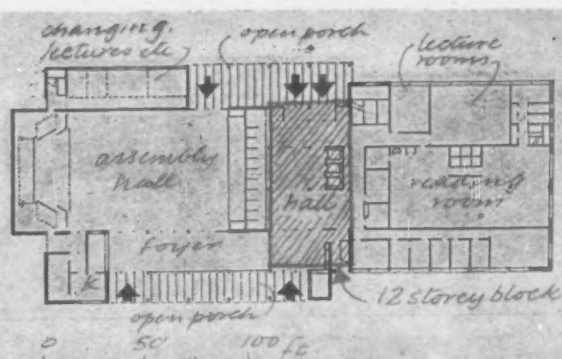


## 5. UNIVERSITY BUILDINGS

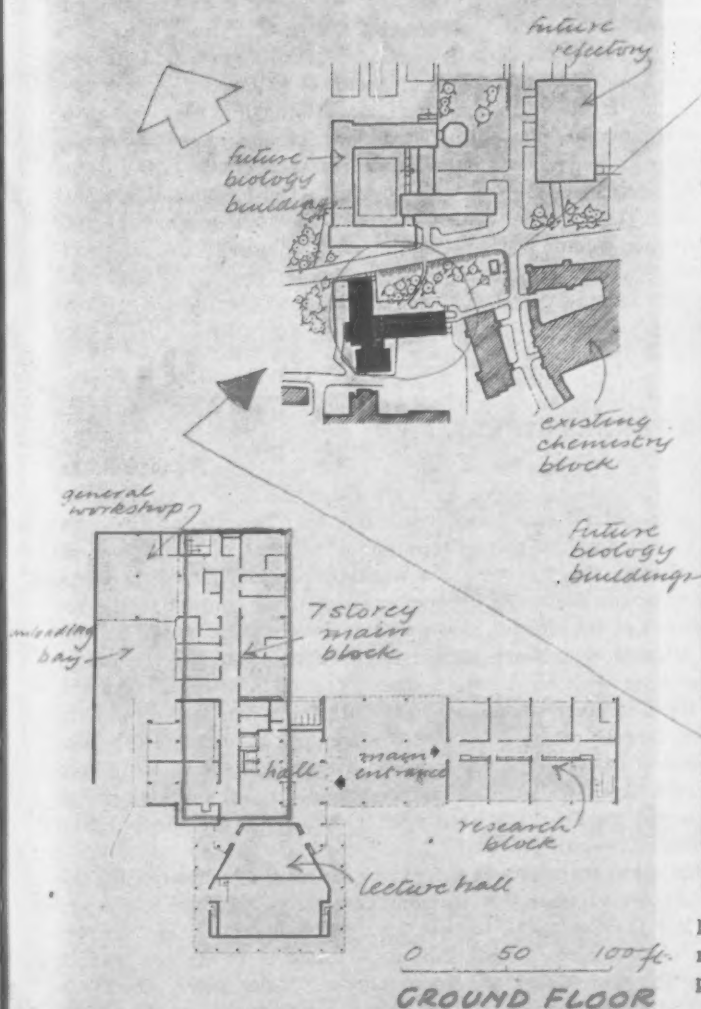
*Chemistry building, Birmingham University, by Plaque and Lacey: above, from ground level; below, from the air. The 7-storey main block has a 4-storey research block at right-angles and a separate wing containing a lecture hall raised above a service ground-floor storey.*







GROUND FLOOR



continued from page 32]

more lecture-rooms at this level. In the lower block each floor, beginning with the third, houses a separate department. The first floor is taken up with a gallery surrounding the entrance hall and administrative offices and the second with three lecture-rooms linked with those in the library wing. The third floor houses the mathematics department, the fourth is the senate floor, the fifth has general offices, the sixth the departments of languages and education, the seventh that of psychology, the eighth that of law and the ninth that of geology. The tenth is the staff-club floor (making the most of the view) with common-room, dining-room and kitchen, and the eleventh has staff cloakrooms, kitchen staff-rooms, motor-rooms and tanks. The college hall has a foyer separating it from the main entrance hall. It has a level floor except for a small number of raked fixed seats at the back. There is a stage with flexible wings and cyclorama.

The structural frame is reinforced concrete on a 20 ft. grid with concrete beamed floors and roofs and structural reinforced concrete walls enclosing stairs and lifts. External walls are natural freestone with panels of vertical timber boarding. Timber windows are double-glazed. The projecting library window has a faience surround.

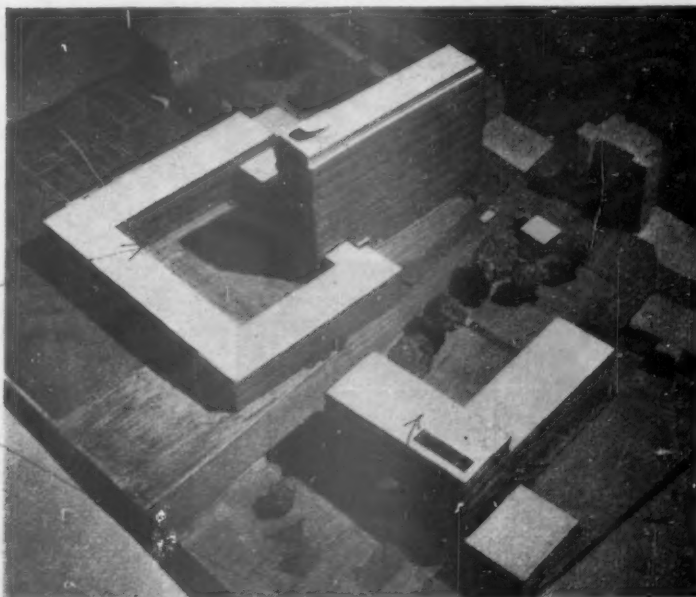
Senior architect: T. R. Spaven. Assistant architect: J. R. Latimer. Structural engineers: F. A. Macdonald and Partners. Heating and electrical engineers: Mackenzie and Moncur. Quantity surveyor: W. J. R. Christie.

## CHEMISTRY BUILDING: BIRMINGHAM

Playne and Lacey

One of the buildings forming part of the large development scheme for Birmingham University prepared by Sir Hugh Casson. No starting date has been fixed.

It adjoins the present chemistry wing of the original university quadrant but occupies a site 20 ft. lower, the approaches to the new building being on three different levels. There are three blocks,

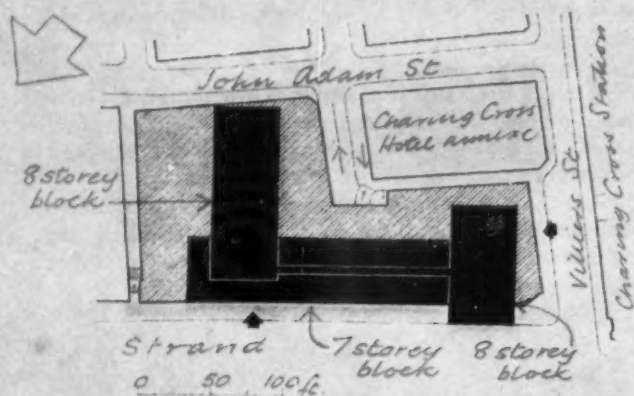


linked to form a rough T-plan: a 7-storey main block, a 4-storey research block and a lecture-hall for 400 students with service and plant-rooms beneath it.

The building is of reinforced concrete frame construction with external facings of brick.

# 6

## OFFICE BUILDINGS



SITE PLAN

### STRAND, LONDON

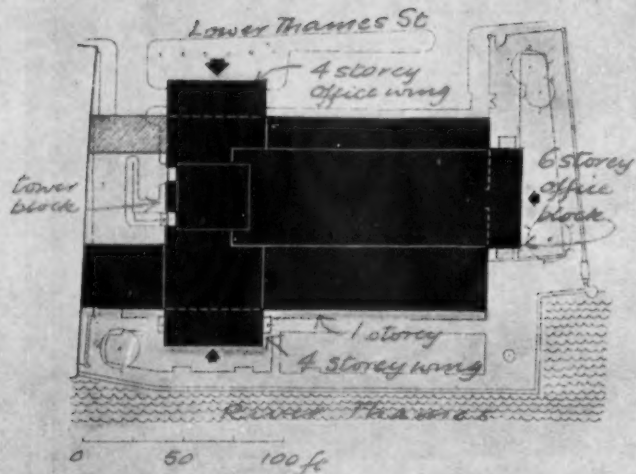
Trehearne & Norman, Preston and Partners

Arising from the redevelopment of the sites south of the Strand immediately east of Charing Cross Station, and from the LCC's Strand widening scheme. The part of Buckingham Street between John Adam Street and the Strand will be closed and Villiers Street widened by 14 ft. Work began on the site last November. It is expected to be complete towards the end of next year.

The building provides 43,000 sq. ft. of shops and 84,000 sq. ft. of offices. The existing pub (St. Martin's Tavern) is being rebuilt and enlarged. In the basement is garage space for 60 cars, reached by a ramp from John Adam Street. Two unloading areas, with turntables and lifts, provide access for goods to the shops and offices. Roof structures are hidden behind screens to give a level skyline.

The building is of reinforced concrete flat beam construction with hollow-pot floors. Columns along the main elevations, up to second-floor level, are faced with precast terrazzo. Above they are faced with Portland stone with alternating stone and ceramic window-panels. The block cantilevered over the Strand at the junction of Villiers Street has columns faced with vitreous mosaic with alternating stone and vitreous glass mosaic window-panels. Rear elevations have reconstructed stone column casings, ceramic mosaic panels and areas of brickwork. Windows are metal casements.

Consulting engineers; R. Travers Morgan and Partners. Quantity surveyors: Cyril Sweett and Partners.



SITE PLAN

### LOWER THAMES STREET, E.C.3

Brian O'Rourke

For the General Steam Navigation Company. The site, on Brewer's Quay, is next to the Tower Steps and Pier west of the Tower of London. Before the war it was a warehouse belonging to the company, which was destroyed by bombing. Planning consent to the redevelopment of the site for offices was at first refused, but on appeal it was allowed with fairly severe restrictions as to site coverage, height and set back on the river side to ensure that the view of the Tower from up river should not be spoilt. The shape of the building has been largely dictated by these restrictions, as well as by considerations of outlook. The wings at the west end of the building help to hide the blank wall of the warehouse on the adjoining site. Site work started in February last year. Construction of the building proper has just begun.

In addition to their normal shipping business the company runs the Eagle Steamer summer service from Tower Pier to Thames Estuary resorts and the Continent, so that during the summer large numbers of passengers are dealt with. This department is at the east end of the building with ticket windows under a loggia. Tower Dock has been filled in and there will be direct access to Tower Pier. The entrance for the main offices is from Lower Thames Street. The ground

[continued on page 89]

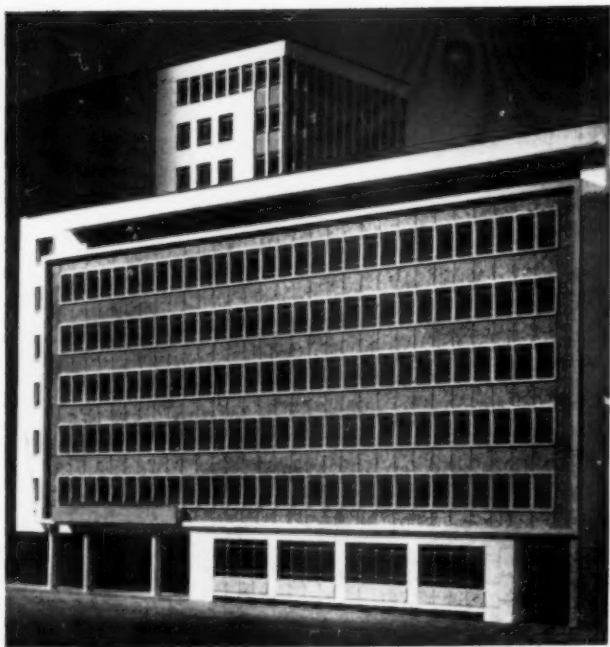


*The Strand, London, showing redevelopment from the corner of Villiers Street eastwards with shops and offices, by Trehearne & Norman, Preston and Partners.*



*Shipping offices in Lower Thames Street, by Brian O'Rourke: the river front.*



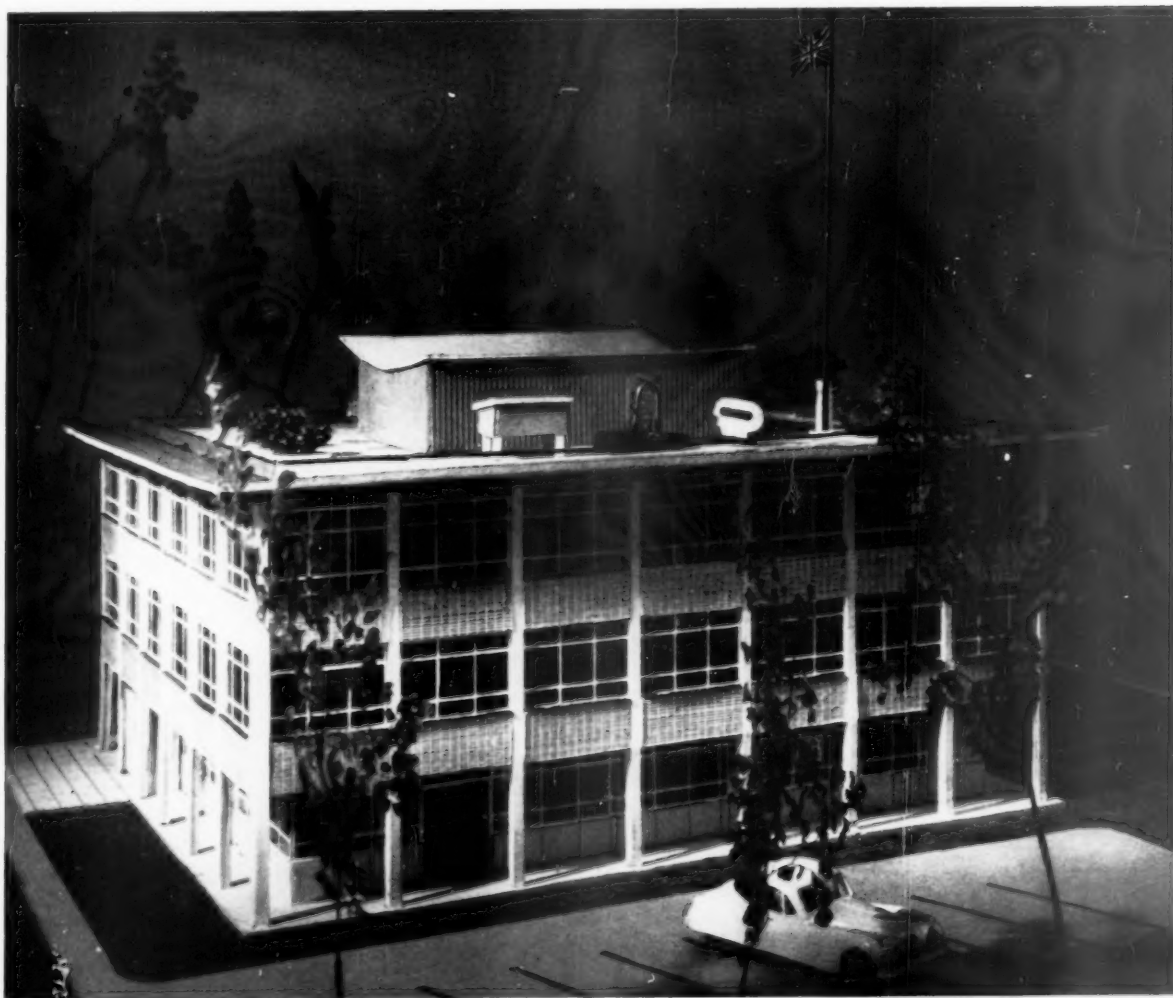


*Office building in the City of London, by T. P. Bennett & Son: elevation to Wood Street.*



*Office building in Manchester, by Arthur Bailey, showing the curved frontage facing Oxford Street.*

## 6. OFFICE BUILDINGS



*Right, office building on a factory site at Crawley, by Edward D. Mills and Partners. The covered way connects the ground floor offices.*

continued from page 36]

floor is largely open, with counters for the shipping departments. The central areas have clerestory lighting. The remainder of the floors are offices. The top floor has a large staff recreation room and small gymnasium. The basement has a large garage area.

Construction is steel frame with concrete floors (cast-in heating panels), and facings of Portland stone and curtain walling designed to allow maximum flexibility of office partitioning. The main foundations, consisting of 3 ft. diameter deep-bored piles, are taken to a depth of between 50 ft. and 60 ft. below basement level.

## CITY OF LONDON

**T. P. Bennett and Son**

In Wood Street: a new head office for the Nestlé Co. Construction started last September.

An L-shaped block, for the most part seven storeys high but with a tower which lines up with the main block of the adjoining building, Garrard House. Between the wings is a service yard from which a ramp leads down to a basement car park. The top floor of the front block contains a laboratory, and the eighth floor of the tower a caretaker's flat. Otherwise the whole building is planned as offices, totalling 54,500 sq. ft.

Construction is reinforced concrete with slab floors giving ceilings without beams. Perimeter columns are at 3 ft. 6 in. centres. The main facing materials are granite and Portland stone on the Wood Street elevation and brick on the rear elevation. The tower block has vertical strip windows with Portland stone between. There are four lifts and a letter-elevator. Lift-halls are artificially ventilated.

Quantity surveyors: Gardiner and Theobald.

## ST. PETER'S SQUARE, MANCHESTER

**Arthur Bailey (Ansell and Bailey)**

On a prominent island site facing the Lutyens war memorial and the Vincent Harris central library and town-hall extension. Part of the site was previously occupied by the Princes Theatre. This is a speculative office building eleven storeys high with a car park in the basement. The heights and positions of the main and wing blocks were determined by rights of light and town-planning restrictions. The curved frontage to Oxford Street is echoed throughout the building with columns and beams concentric and radial to the curve. Carcase work and cladding are due to be completed shortly but the interior will not be finished until late this year, when tenants' requirements are known.

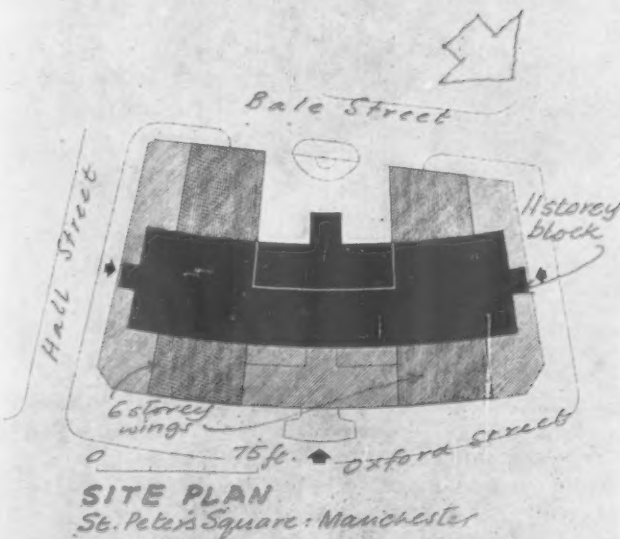
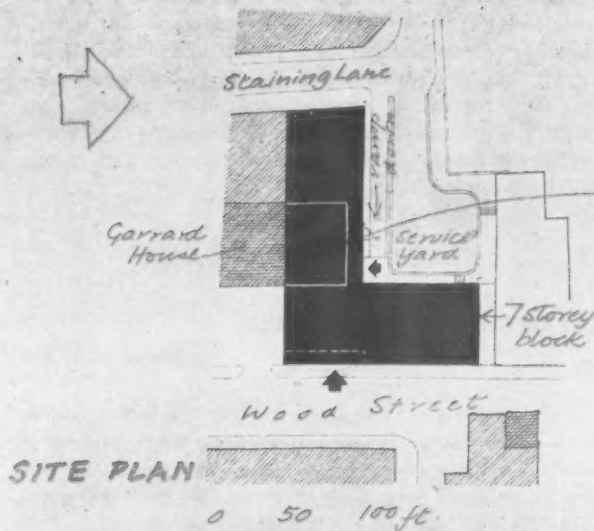
The building has a reinforced concrete frame with solid slab floors. Spans and column sizes were designed to minimize variation in window openings, only ten sizes being used for 600 frames. The building is faced with Portland stone. Copings are of reconstructed stone and window cills of slate. There are four passenger lifts, two serving the five lower floors only.

Consulting engineers: Scott and Wilson, Kirkpatrick and Partners.

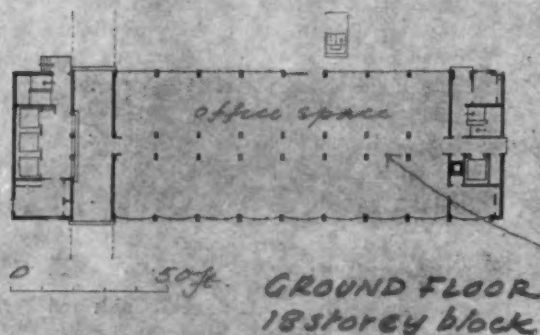
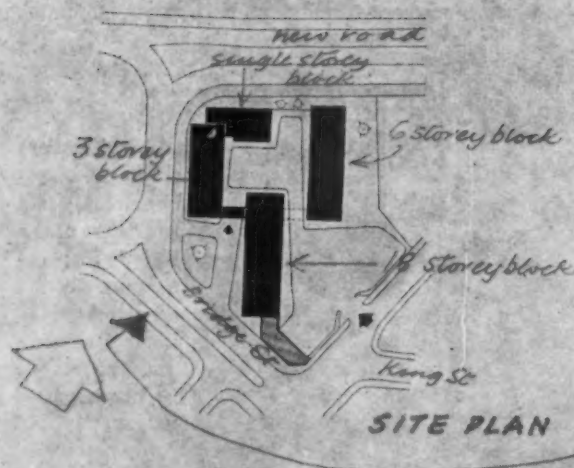
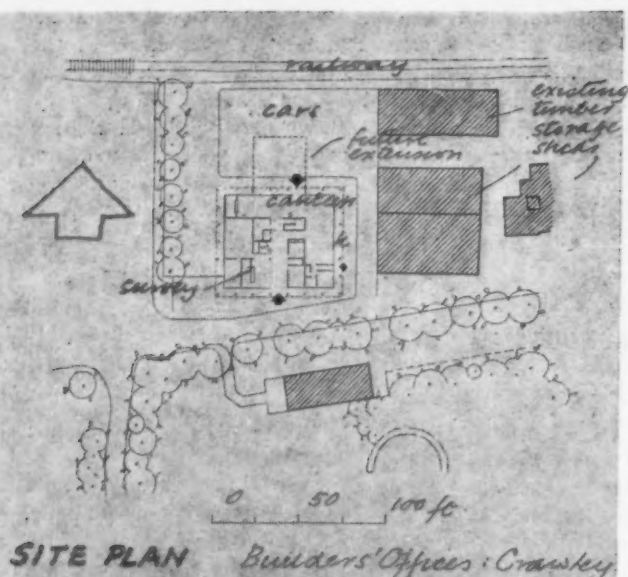
## BUILDERS' OFFICES: CRAWLEY

**Edward D. Mills and Partners**

Part of a factory development scheme illustrated in the AR Preview issue, 1955, but since then changes in the plan of the area of the new town in which the factory is situated have necessitated a new design (illustrated here) for the office block. The builders are James Longley



## 6. OFFICE BUILDINGS



and Co. The offices adjoin the works entrance of the existing factory, which is near the new Crawley railway station. Site work will begin early this year.

There are three floors, of which the ground contains a canteen, a social room and the surveying department, the former being planned as a self-contained unit that can be used after office hours. A set-back provides a covered way round the ground-floor offices. The first floor contains the accounts department and other offices and the second the directors' suite (including board-room), the drawing office and the estimating department. On top is a roof garden. Services (including printing and photographic dark-rooms), lavatories and a large entrance hall occupy an artificially lit central core.

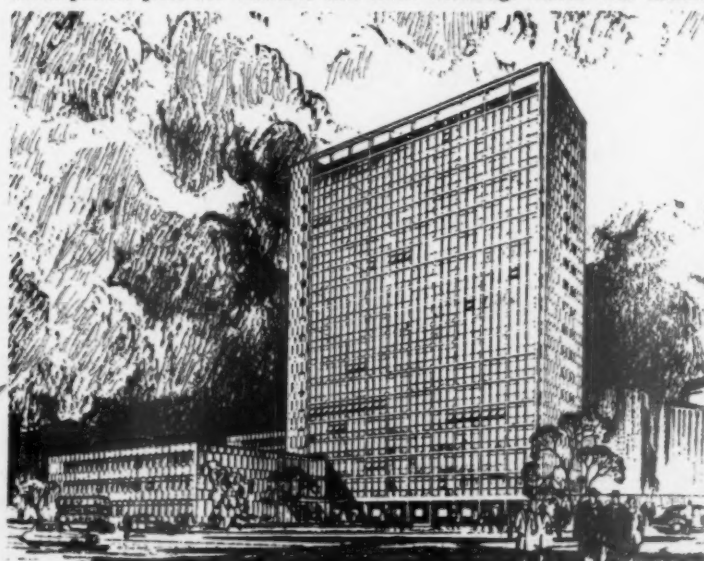
Construction consists of precast reinforced concrete columns with a floor slab composed of an in situ perimeter beam and precast infilling providing a flat ceiling. External infill panels are of precast concrete faced with clay brickettes. Exposed surfaces of columns are covered with tile mosaic. Windows have timber frames and steel opening lights. Internal partitions, apart from those forming part of the central core, are demountable.

Consulting structural engineer: H. Kaylor.

## GOVERNMENT OFFICES: MANCHESTER

Ministry of Works

To rehouse various Government departments that are now scattered about Manchester. The site, in Bridge Street near the west end of Deansgate, backs on to the proposed new civic centre road crossing the Irwell and is convenient also to Salford. The area is reserved in the development plan for cultural and civic building, which will include



the new law courts, the Irwell college of further education and the independent television studios. The offices take the form of an 18-storey tower block and two other blocks of 6 storeys and 3 storeys. Construction began a year ago, and will take two years.

The buildings have a reinforced concrete frame, with twin spine columns on either side of a centre corridor. The end towers have concrete walls faced with Portland stone, which is used as permanent shuttering. Standard movable partitions are used internally. Cladding is of Portland stone with window panels of coloured glass. Ground floor openings on the west elevation are filled with glass bricks.

Senior architect in charge: E. H. Banks. Senior engineer (responsible for heating and water supply): C. W. Cook. Consulting structural engineers: Travers, Morgan and Partners.



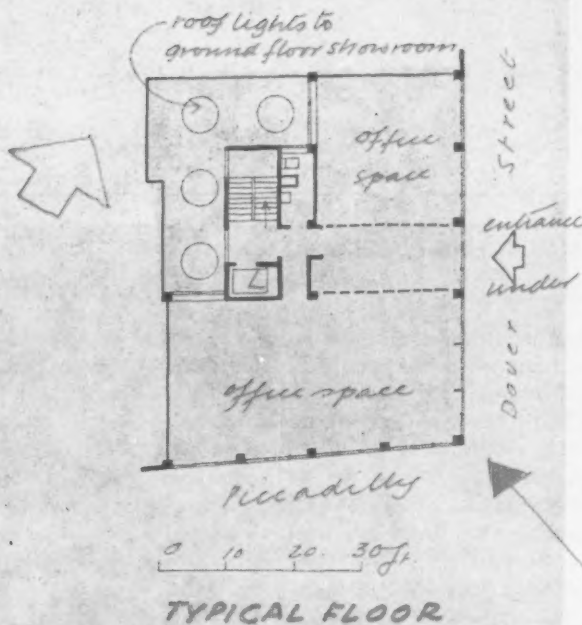
## PICCADILLY, W.1

Ernö Goldfinger

At the corner of Piccadilly and Dover Street, on a site at present occupied by three much-altered late eighteenth-century houses, two of which are joined together, entered from Dover Street. The new building is planned for one, two or three shops or showrooms on the ground floor and something over 1,600 sq. ft. of office space on each of five upper floors. No starting date has yet been fixed.

The office entrance remains in Dover Street, with stairs rising 4 ft. from street level to a lift and staircase hall. Only one staircase is required as there is escape from the upper floors over neighbouring buildings. The upper part of the office windows is recessed to form a 'photobolic screen' which throws the light further into them.

Construction is a reinforced concrete frame with thin reinforced concrete carrying walls enclosing lift-shaft and staircase. Cladding is grey granite.



TYPICAL FLOOR

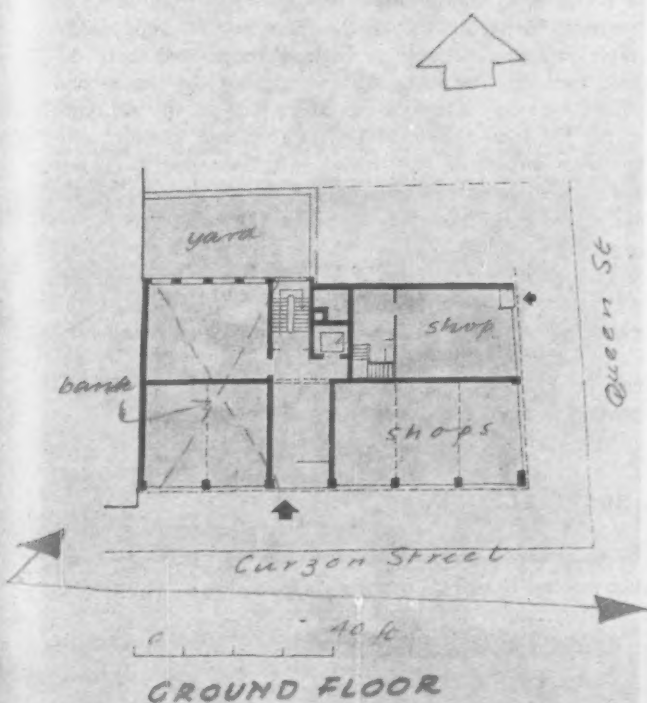
## MAYFAIR, W.1

Bridgwater and Shephard

On the corner of Curzon St. and Queen St., for Messrs. Jackson-Stops and Staff. The site was occupied by three Georgian houses, which were destroyed by bombing. Already under construction.

The building has a slightly greater volume than the floor-space index of  $3\frac{1}{2}$  for this area would normally permit because of the size of the previous buildings. The basement is mainly for storage; on the ground floor are shops and a bank; on the first, second and third floors offices, and on the top floor two flats. Tall windows reaching to the ceiling, with splayed reveals, are designed to give even distribution of light inside the offices.

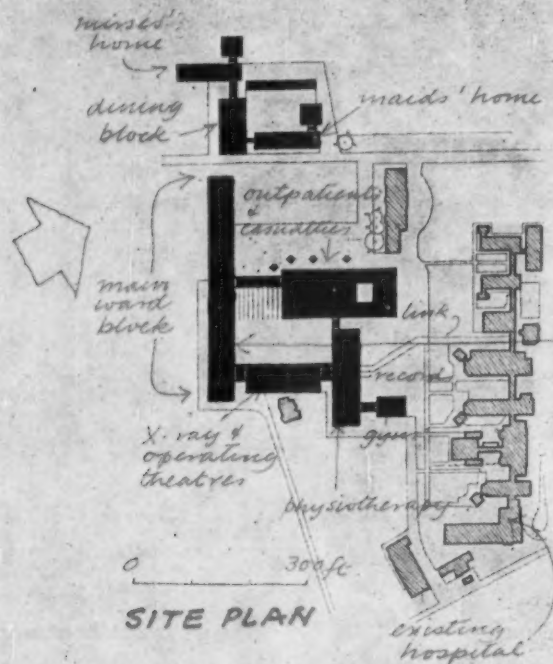
Ground floor and basement are of reinforced concrete frame construction. Upper floors have  $14\frac{1}{2}$  in. brick walls supporting concrete floors. The penthouse flat is in timber with a copper roof. Ground-floor walls are faced with green Vert Stella marble and upper floors with London stocks. Windows are steel with external reveals plastered and painted. Heating is by ceiling-panels embedded in the concrete.



GROUND FLOOR

# 7

## HOSPITALS



### GENERAL HOSPITAL: KETTERING

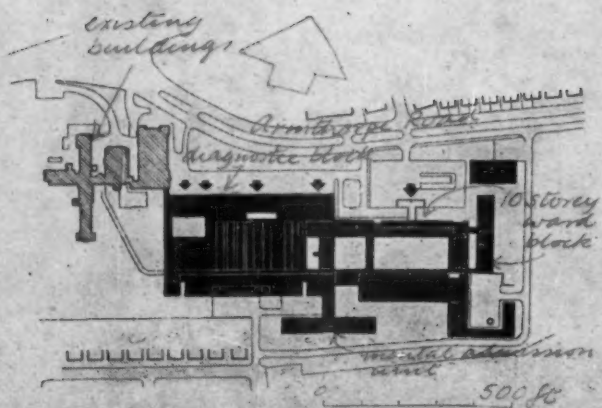
Gollins, Melvin, Ward and Partners

For the Oxford Regional Hospital Board: an extension of the existing general hospital on the outskirts of the town, which consists of single-storey 19th-century wards incapable of modernization, a 4-storey block built between the wars and various subsequent temporary structures. The extension is being built in two stages, the first stage (comprising one accident-ward for 40 patients and the bulk of the ancillary departments) will begin in the autumn of this year, being preceded in March by the maids' home. A home for 45 nurses forms part of the second stage, along with the main ward block and the balance of the ancillary departments.

The first-stage ancillary departments (consisting of the X-ray, outpatients, casualty, operating, physiotherapy, records and pharmacy departments) and the accident-ward occupy a low building, varying between one and three floors in height, sited between the existing hospital and the future ward block, to both of which it is connected by covered ways. When the ward block is built the better of the old buildings will be converted to administration and the rest demolished.

The levels of the site and the present dangerous approach from the main road required a new access, which leads direct to the new main hospital entrance and to the outpatients' and casualty departments. Thence a ground-floor corridor leads to the X-ray, records and pharmacy, all departments which must be easy of approach by the public. The accident-ward and operating suite (which will be eventually extended to four theatres) are on the first floor. On the lower ground floor lies the physiotherapy department, an arrangement which facilitates the planning of the gymnasium as a separate building of more than average floor-to-ceiling height. The nurses' and maids' homes have their own single-storey recreational rooms and share the centrally placed canteen. The eight wards proposed for the second stage are planned two on each floor on either side of the staircase and lift core. On the lower ground floor is a central kitchen with access by lift to the servery in each ward unit. Space has been left on the site for four further nurses' homes.

Construction of the main ward block and the 2- and 3-storey part of the ancillary service block consists of a reinforced concrete frame with external wall panels in prefabricated metal units. Internal partitions in lightweight concrete block follow a 5 ft. planning grid. Floors are beamless concrete slabs. The single-storey outpatients' and casualty block has a lightweight steel frame, steel lattice roof beams and metal-frame curtain walling. The maids' home has load-bearing brick walls, precast concrete floors and a timber roof.

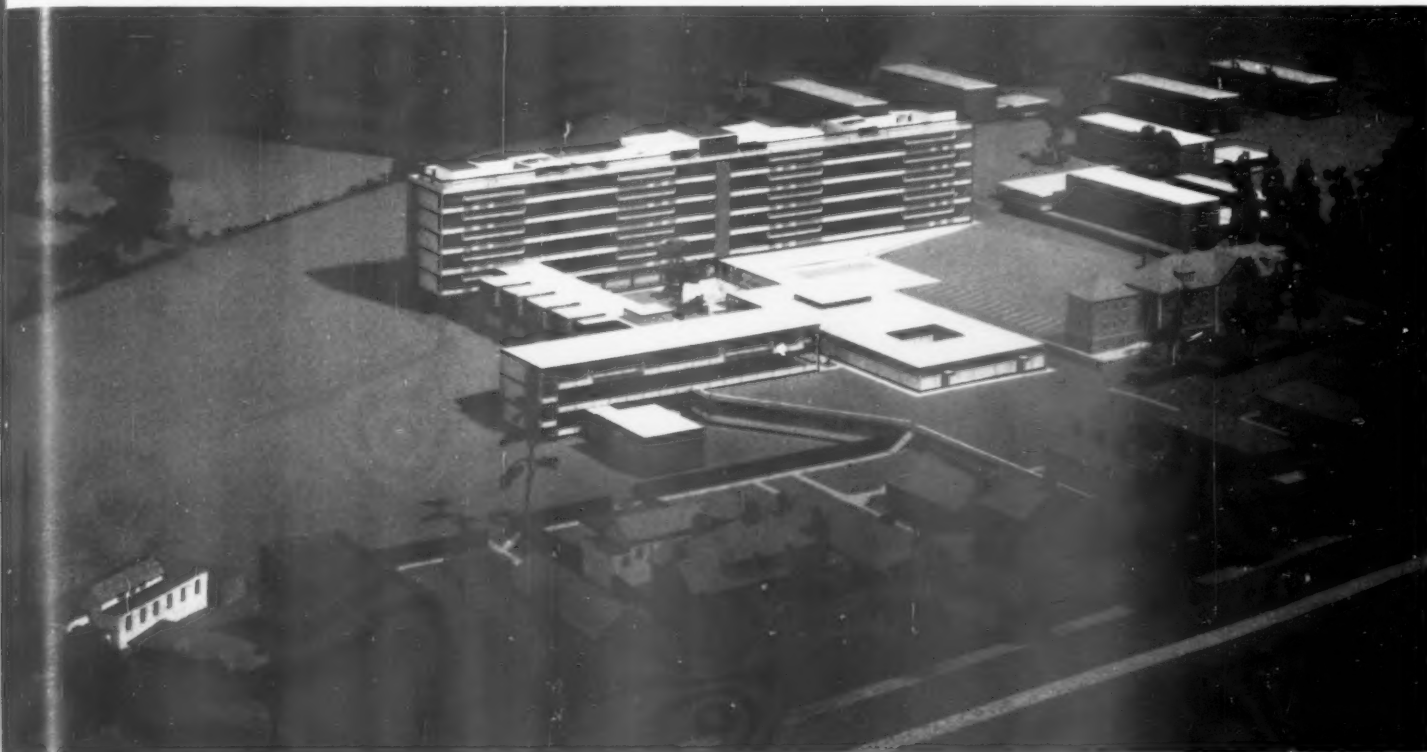


### GENERAL HOSPITAL: DONCASTER

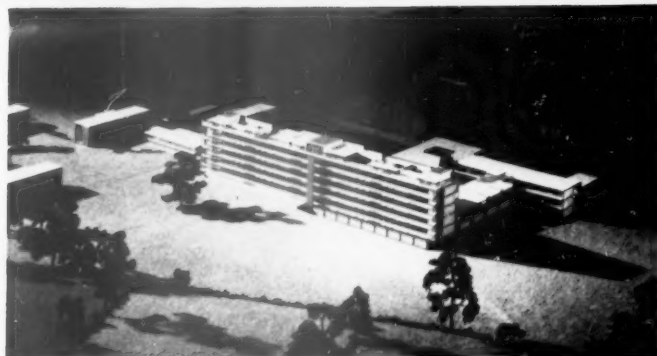
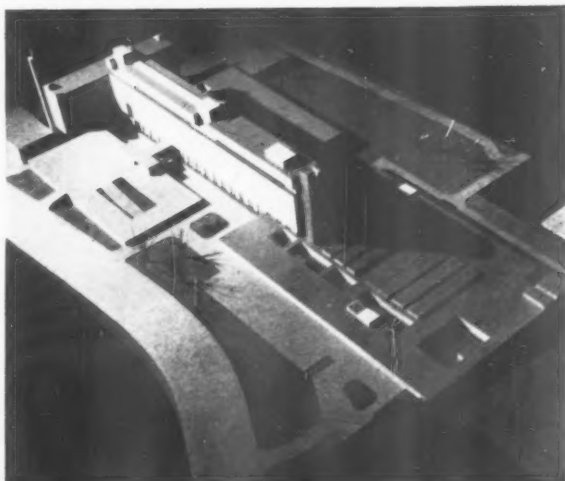
Pite, Son and Fairweather

An extension of the Royal Infirmary, on land newly acquired to the east of the existing buildings, which provided 150 beds when

(continued on page 45)

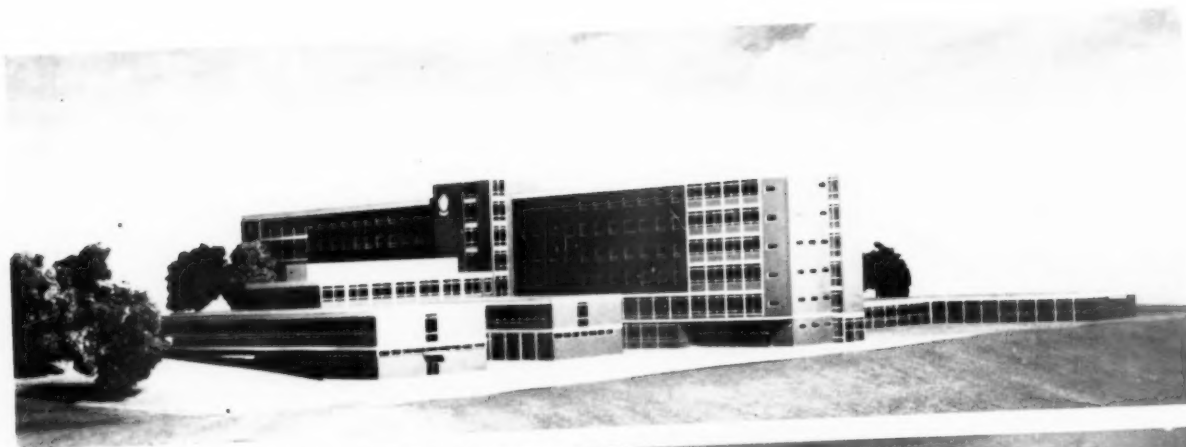


*Below, general hospital Doncaster, by Pile, Son and Fairweather, from the west. The 10-storey T-shaped ward block is seen beyond the low diagnostic block.*



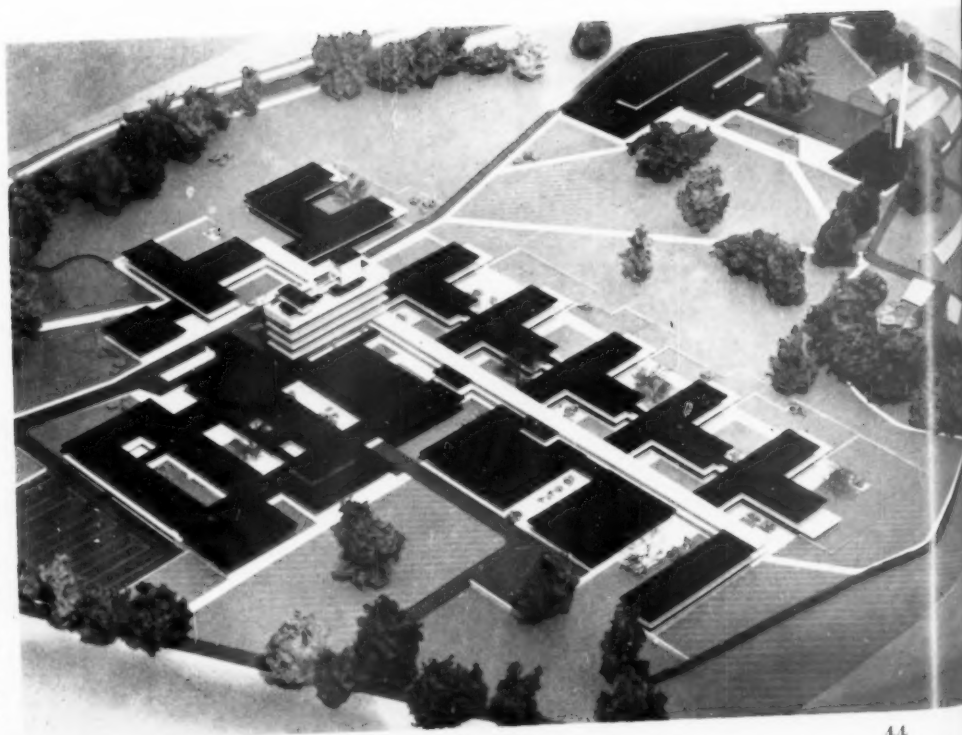
*New buildings for Kettering Hospital, by Gollins, Melvin, Ward and Partners: top, from over the roofs of the existing buildings, showing the main ward block with the ancillary departments in front of it, connected to it by covered ways. Immediately above, the main ward block from the other side.*





*Hospital in Harlow, Essex, by Easton and Robertson: top, from the north-west; bottom, from the south-west, showing the main ward block with the physiotherapy department, ante-natal clinic and maternity wing in front of it.*

## 7. HOSPITALS



*Hospital at Wythenshawe, Manchester, by Powell and Moya, showing the identical two-storey, L-shaped wards linked by a corridor leading to a central high block containing the administration department and with the operating theatres on its opposite (north) side.*

continued from page 43]

built in 1926 and to which another 184 beds were added during the war in temporary hutted wards. The new buildings provide 485 beds, and ancillary departments in a separate diagnostic block which will be common to the new and old buildings. The latter are replanned and the accommodation up-graded, providing 123 beds (making 608 in all), the remaining space in the original buildings being adapted for other purposes. The chest clinic (part of the diagnostic block) will begin in March, followed by the main wing of the new ward block, remainder of the diagnostic block and four of the six operating theatres. The second wing of the ward block, the remaining operating theatres and the adaptation of the existing buildings will follow.

The T-shaped ward block is 10 storeys high with offices, stores, etc. on the lower levels and the main kitchen and dining-rooms on the top floor. The sloping ground has made it possible to plan three independent levels of circulation (for visitors and administrative staff, for patients and nurses and for goods and services) each with entrances from ground level. The diagnostic block contains out-patients', casualty, pathology and X-ray department, a chest clinic and the main dispensary. Between it and the ward blocks are the six operating theatres with the central sterilizing department beneath. Adjoining are the boiler-house, workshops, stores, etc.

The buildings are of reinforced concrete frame construction, the ward blocks being faced with precast exposed-aggregate concrete slabs and the diagnostic block with brick.

#### GENERAL HOSPITAL: HARLOW

Easton and Robertson

For the North-East Metropolitan Regional Hospital Board. The site adjoins the new town centre and has a park-like character which is preserved. The approach is from a by-road and access to all the patients' departments is from the forecourt, except for the maternity cases who have a separate entrance. The first stage, comprising out-patients, casualty and radiology departments, will begin in March this year and be completed within two and a half years.

The buildings consist of a 5- and 6-storey ward block built across the natural fall on the site, flanked by low buildings housing out-patients, casualty and radiology, operating theatres and service departments to the north; and physiotherapy, ante-natal clinic and maternity wing to the south. The fall in the ground provides horizontal circulation for patients and services at different levels. A small nurses' home will be built later on the south boundary of the site and a few houses for senior staff on the east side. A separate boiler-house for the whole site development is planned to the north.

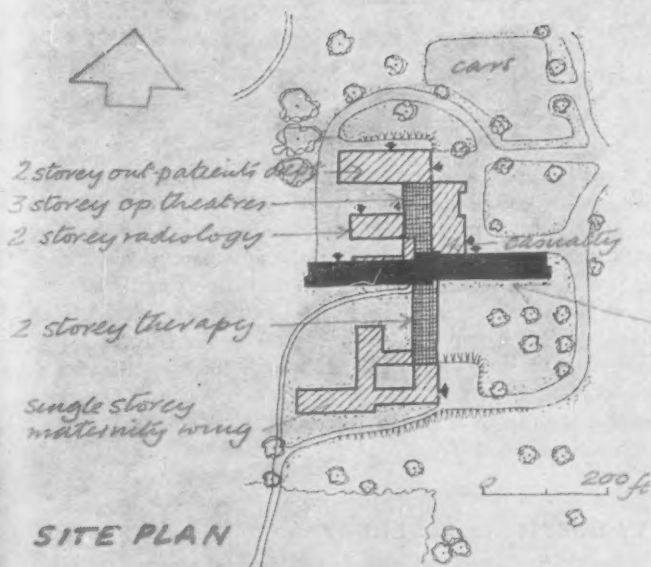
The structure is a reinforced concrete frame with brick cladding in two tones to the main block. The lower blocks have panel infilling to the framework. Windows are metal, with slate cills.

Associate architect: W. G. Plant (architect to the North-East Metropolitan Regional Hospital Board). Quantity surveyors: Hamilton H. Turner and Son. Consulting engineers: R. T. James and Partners; G. H. Buckle and Partners.

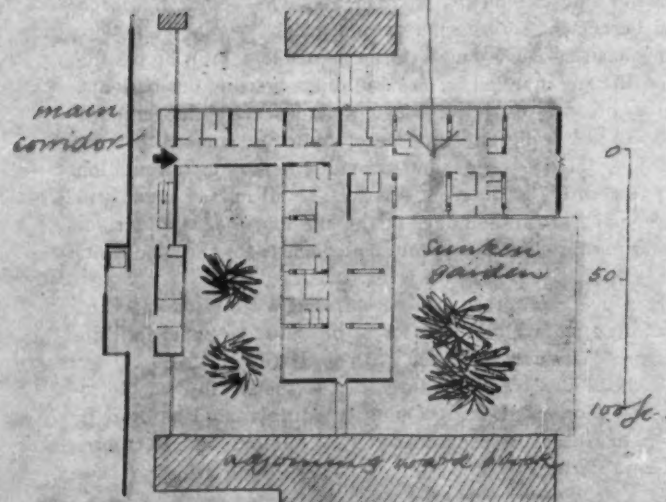
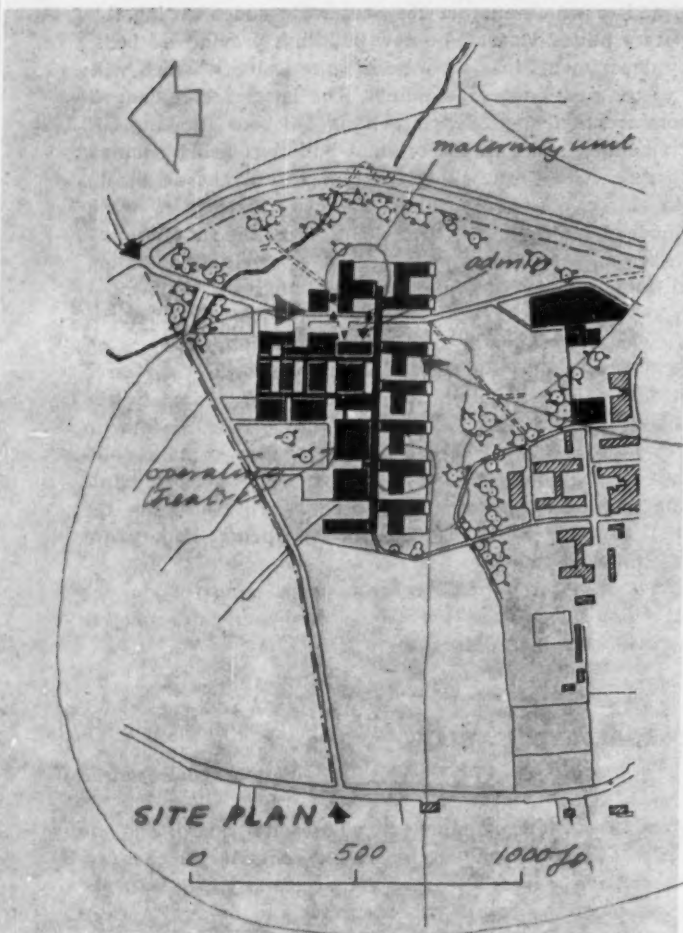
#### GENERAL HOSPITAL: WYTHENSHAW

Powell and Moya

For the Manchester Regional Hospital Board: a new hospital with 496 beds, replacing a hutted hospital and adjoining the existing Baguley Hospital which some of the new departments (out-patients, pathology, central sterilizing department and bulk stores) will also serve. The new laundry will probably serve the whole of the South Manchester group of hospitals. A 60-bed maternity unit, which is part



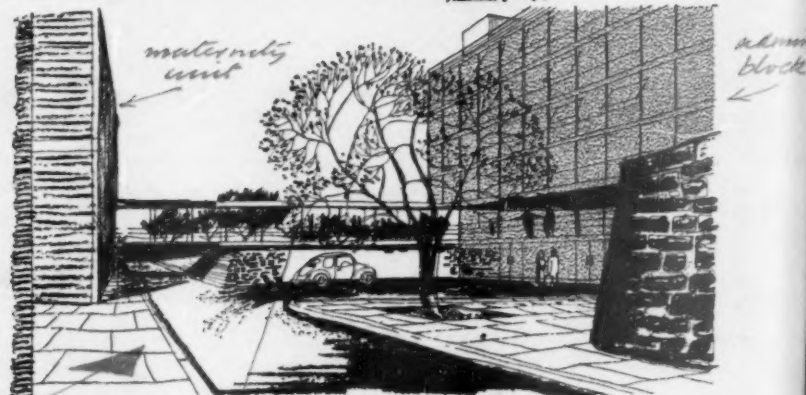
## 7. HOSPITALS



typical WARD PLAN  
General Hospital: Wythenshawe

of the new hospital, has been planned so that it can be built as an independent first stage. The site, being on the edge of the Wythenshawe estate, has open views in several directions and many good trees. Work will begin at the end of this year or the beginning of next.

The wards have been planned as a number of L-shaped, 2-storey blocks, linked to a main corridor running east to west. The adminis-



tration department occupies a tower on the north side of the corridor at its eastern end, with the visitors' entrance on its ground floor. Further east, across the approach road and connected to the main building by a bridge, are the maternity unit, the ante-natal clinic and the children's wards. The medical departments and operating theatres are planned on two levels on the north side of the corridor. The service buildings are in a separate group to the south (nearer the Baguley Hospital which they also serve) and with the new laundry form a walled compound.

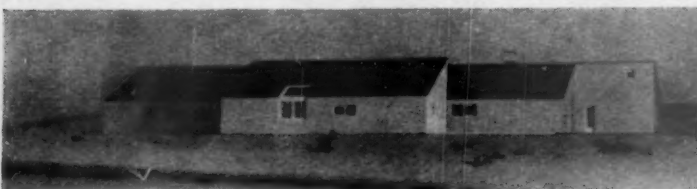
The project being only in a sketch stage, structural methods and materials are not yet decided.

### MATERNITY HOSPITAL: ALDERNEY

Richard Llewelyn Davies

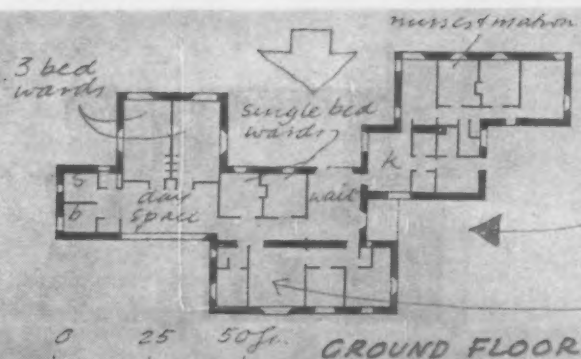
The present hospital on the island is in a converted public house and is inconvenient and poorly equipped. The new building is being paid for out of funds made available to the Mignot Memorial Trust by the Nuffield Provincial Hospitals Trust. Except in the summer holiday season, the hospital is mainly for maternity cases. Work started in April, 1957, and should be completed in April this year.

The site is extremely exposed and slopes upwards to the south. To the north there is an extensive view. The building has eight beds in two 3-bed wards and two single-bed wards. There is a day space



46 View of hospital at Alderney from the north





and the usual ward facilities. These are shared with a small out-patient department and there is also a combined operating theatre and delivery room. There is accommodation for a matron and two nurses.

Construction is local stone salvaged from a nearby derelict chapel. External walls are of cavity construction with an inner leaf of 3 in. locally produced concrete blocks. The roof is of slate and the larger rooms extend up into the roof-space. The hospital is centrally heated from an oil-fired boiler.

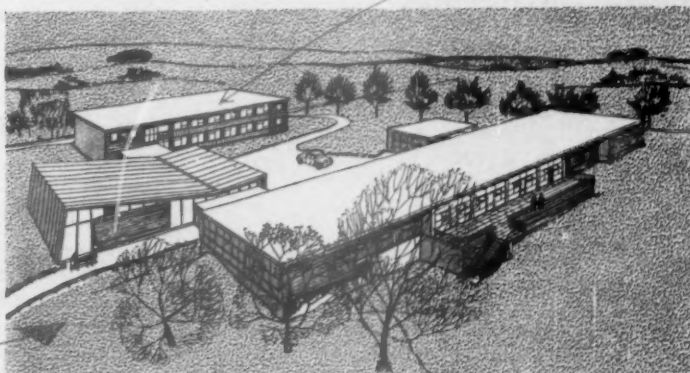
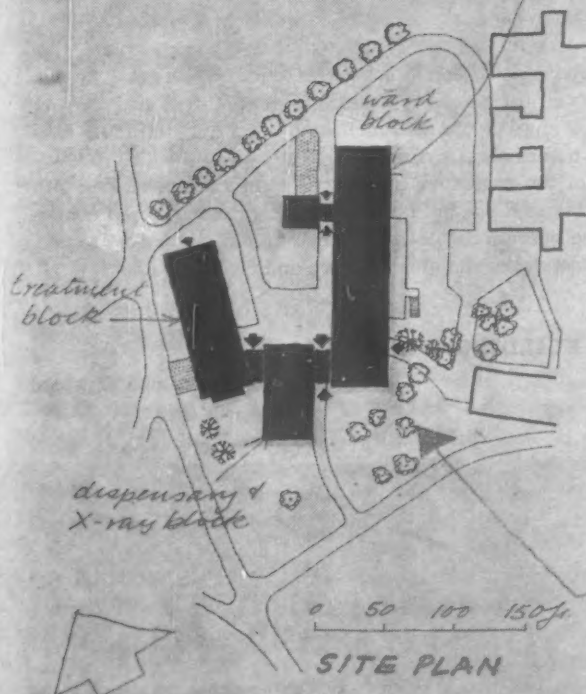
Executive architect: Derek Bowes. Quantity surveyors: Davis, Belfield and Everest.

### HOSPITAL AND TREATMENT CENTRE: DURHAM

S. W. Milburn and Partners

Part of Prudhoe and Monkton mental hospital. The new building, which comprises a single-storey ward unit, X-ray block, dispensary, and 2-storey treatment centre, forms the second stage in the extension of the sick quarters of this hospital, which is now being doubled in size to accommodate 1,200 patients. Work is about to begin.

Because of the necessity of co-ordinating the medical services in one central area, the building has had to be planned on a steeply sloping and somewhat restricted site adjacent to the existing buildings, and advantage has been taken of the falls to provide storage space under the lower part of the block. The ward unit, which is for male patients, provides two 10-bed wards, one 6-bed ward, and six single-bed wards, as well as the usual day space and treatment rooms. A waiting-room with a bed and separate toilet facilities is provided for parents visiting critically ill patients. The central section of the building includes the X-ray department and, on the opposite side of the central corridor, the dispensary. The 2-storey treatment block fronts on to the main drive and will also be used by out-patients. On the



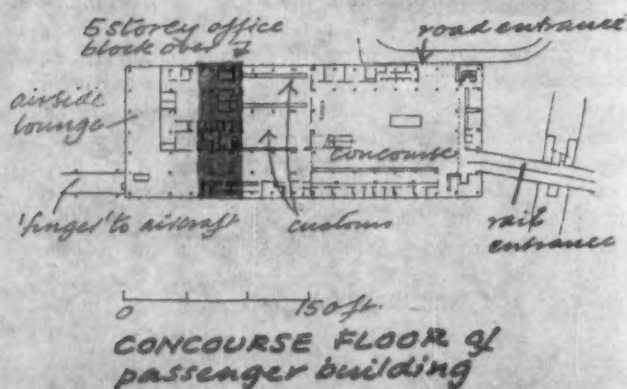
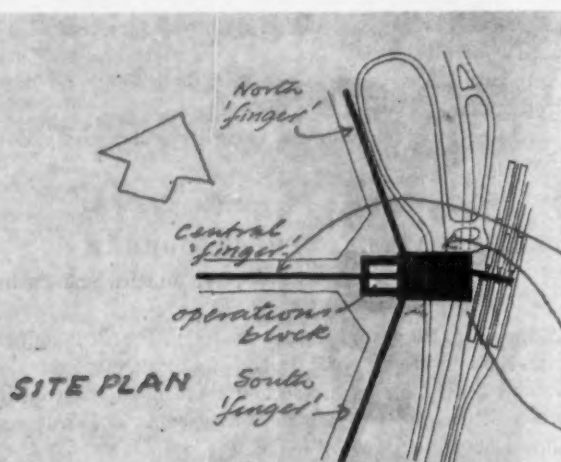
ground floor are consulting rooms, special treatment, dental and ophthalmic rooms. Upstairs are the staff, records, and psychologists' rooms as well as the bio-chemical and pathological departments.

Construction is brick with light buff brick facings and reinforced concrete floors. Windows are metal in timber sub-frames with panels of Westmorland slate between the ground and first floor windows of the treatment block.

Associate architect: P. H. Knighton (architect to the Newcastle Regional Hospital Board). Quantity surveyors: Thomas Barrett, Sons and Partners.

# 8

## AIRPORTS



### TERMINAL BUILDING: GATWICK

Yorke, Rosenberg and Mardall

For the enlarged airport so that it can serve as an alternative to London Airport. It consists of a passenger building raised above the roadway, which passes beneath it, a single-storey quadrangular operations building containing meteorological and other offices, crews' quarters, etc., and (passing over the latter) a 900-ft. long 'finger' or enclosed footway by which passengers reach the aircraft. Two other fingers, leading from the corners of an extension to the passenger building, can be added later. Above the passenger building is a 5-storey office block. The building is now under construction.

The passenger building is reached by a high-level road entrance in the form of a raised platform and by a bridge from the railway station which is now being reconstructed. These take passengers direct into the main concourse. At concourse level are also some offices, customs halls for incoming passengers, immigration hall and airside waiting hall. On the floor above are more offices, lounge, restaurant and kitchen. There is no outgoing customs hall, checking being done at airline ticket counters. Baggage is moved to and from the airside baggage handling area beneath the passenger building by mechanical conveyor belts. The 'finger' is two storeys high with a roof-terrace above to which the general public will have access. On the lower level are assembly areas, customs offices, etc., and on the other the passenger footway which is divided longitudinally into a customs and a non-customs passage.

Construction of the passenger building is reinforced concrete, with cladding consisting of R.S.J. mullions on a 10 ft. grid, hardwood frames and glazing. The operations block and the 'finger' are steel framed. The latter has steel decks and glazed screen and central walls.

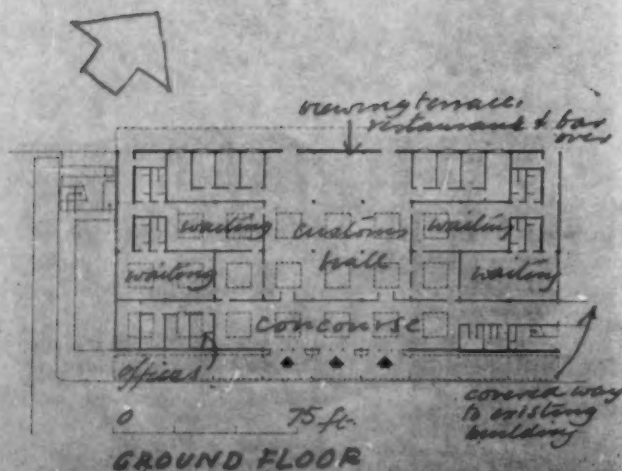
### PASSENGER BUILDING: BIRMINGHAM

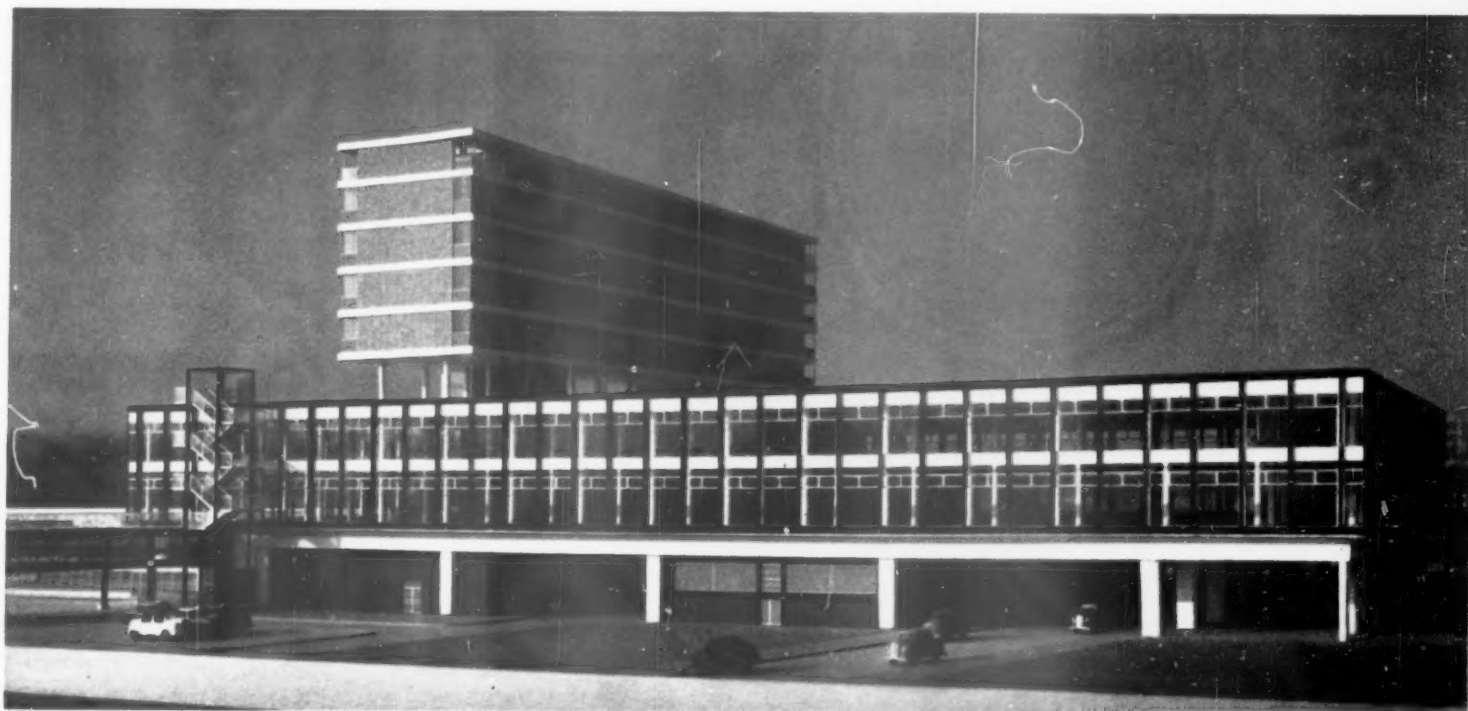
Norman and Dawbarn

An extension of the Elmdon Airport terminal building, designed by the same architects in 1937. The shape of the recently extended parking apron determined the oblique line of the new building. Existing offices are cleared out of the ground floor of the old building and the area made into a general concourse, extending under one of the two concrete canopies originally provided for the embarkation and disembarkation of passengers. The new building, designed for international traffic, is connected to this concourse by covered ways. Work will probably begin this year.

It is planned on two floors as an easily expandable rectangle, with the passenger-handling area at ground level. Ground-floor partitions (except those of the cloakroom areas) are demountable so that methods of passenger handling can be changed with the minimum disturbance. On the first floor are a viewing-gallery, restaurant and bar.

The structure is a reinforced concrete frame with timber curtain-walling.





*Terminal buildings for Gatwick Airport, by Yorke, Rosenberg and Mardall (see also the cover of this issue). Above, the passenger building with the five-storey office block rising above it. Right, the whole group from above showing the high-level vehicular approach.*

*Below, new passenger building at Elmdon Airport, Birmingham, by Norman and Dawbarn; an extension of the existing terminal building by the same architects, which is seen in the background.*

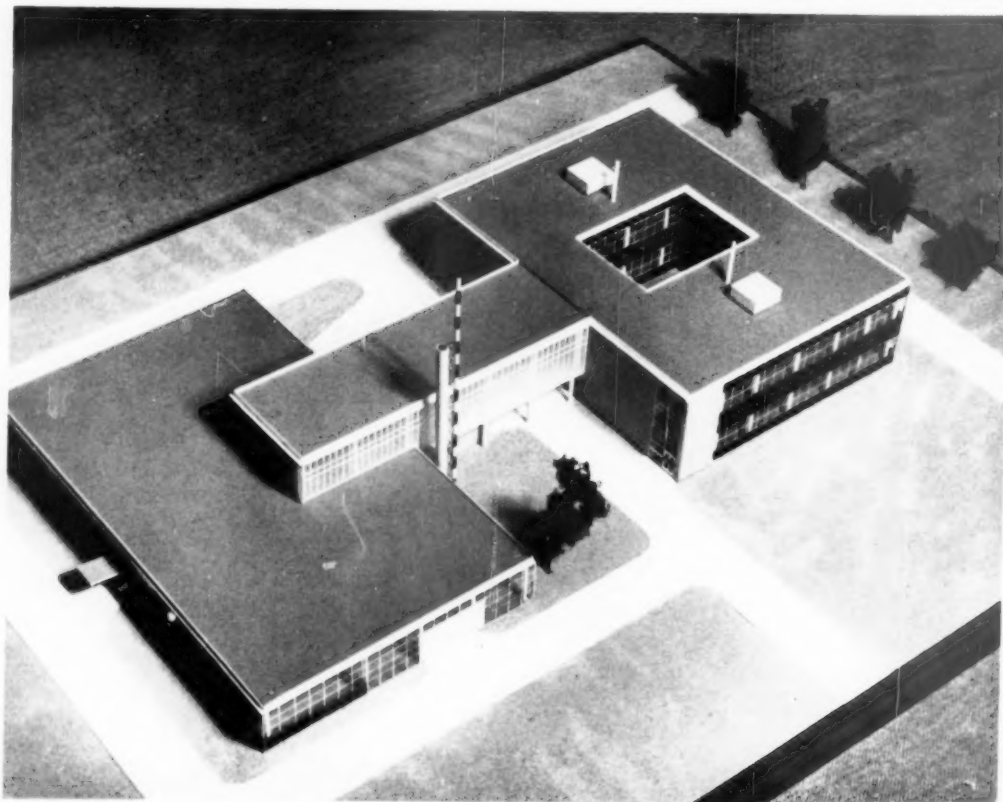




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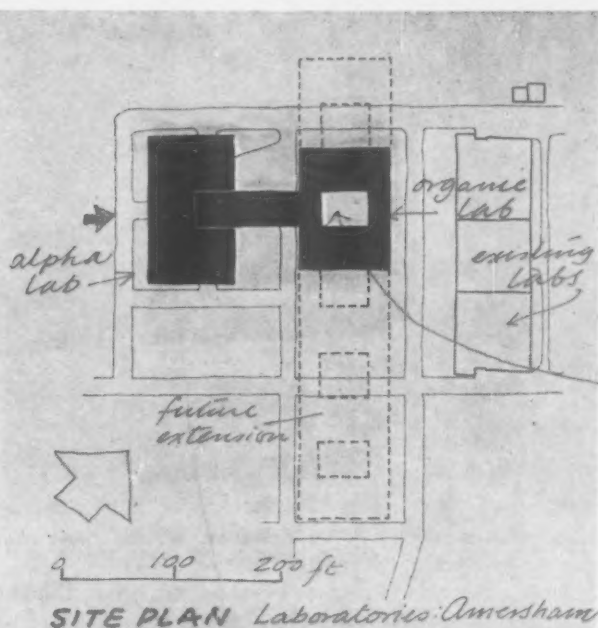
## INDUSTRIAL BUILDINGS

*Radio-chemical laboratories at Amer-sham for the Atomic Energy Commission by Jefferiss Mathews. On the left is the alpha laboratory and on the right the organic laboratory. They are linked by a plant-room which serves them both.*



*Below, factory at Wokingham by Yorke, Rosenberg and Mardall.*





## LABORATORIES: AMERSHAM

Jefferiss Mathews (J. Douglass Mathews and Partners)

For the Atomic Energy Commission's Radio-Chemical Centre: two separate laboratories, one of 15,000 sq. ft. for organic production (radio-active work with organic compounds) and one, of 11,500 sq. ft., for alpha production (chemical work with radium and similar materials); also a plant-room to serve both laboratories. The site is an open one, approached from White Lion Road through existing development from which the new buildings will be screened by trees and a hedge. It is hoped to begin construction next month.

The organic laboratory consists of four main laboratories planned on two floors round a central court so that they can be extended when necessary on the east and west. Ancillary laboratory space is on the south and the main entrance and stairs on the north. An escape stair at the south-east corner will also serve the future extension. The alpha laboratory is all on one floor. The working space surrounds a central area within a heavy concrete screen inside which radio-active operations are carried out. Ancillary laboratories and the main entrance are on the south side. The plant-room links the two blocks at first-floor level over the central service road. On its east side are the main extract ventilation stack and a 75 ft. exhaust mast.

Both laboratory blocks have reinforced concrete precast columns and beams on a 4 ft. module. The alpha block has curtain-wall cladding on all sides; the organic block on three sides with the fourth side of brick. Mullions are aluminium. The walls of the plant-room are patent glazing. The organic block is a completely sealed air-conditioned building except for the opening lights in the offices on the south side. Services run between the first floor or roof structures and a false ground-floor ceiling.

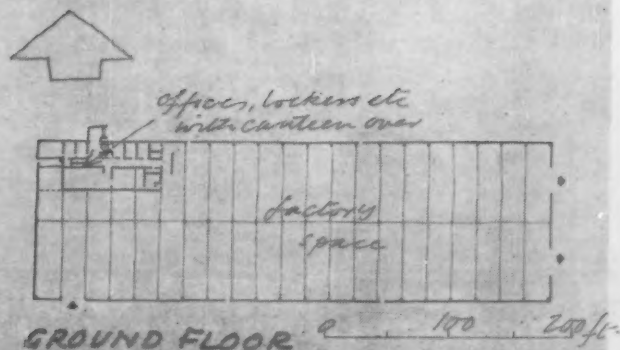
## FACTORY: WOKINGHAM

Yorke, Rosenberg and Mardall

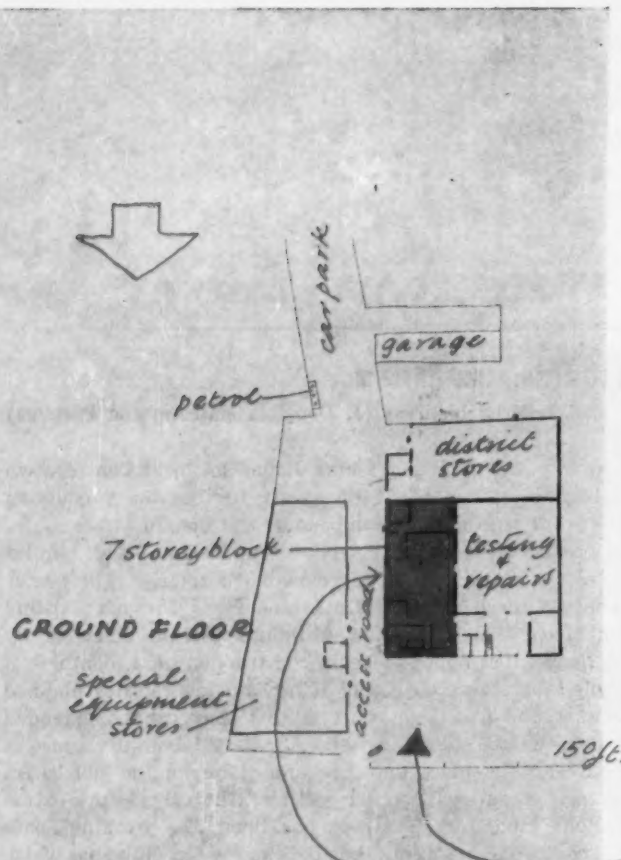
The site is an industrial estate. The requirement was for separate machine and assembly bays, each served by cranes spanning 60 ft. at different working heights. Construction will begin shortly.

The above requirements produced a basic structural grid of 63 ft. by 20 ft. To reduce the internal volume there is a suspended ceiling immediately below the roof trusses, and all services are concealed in the void above. External walls are designed to be dismantled and re-used as further production bays are added.

The main structure consists of box or broad flange stanchions and lightweight trusses. External walls are aluminium panels insulated with glass silk up to a height of 7 ft. 6 in., clear glazing for 4 ft. above this and patent glazing with roughcast ceramic glass above this to the eaves. Roofing is reinforced gypsum slats with bituminous felt and granite chippings. Space-heating is oil fired. There is an extract fan system for ventilation in the summer months.



## 9. INDUSTRIAL BUILDINGS

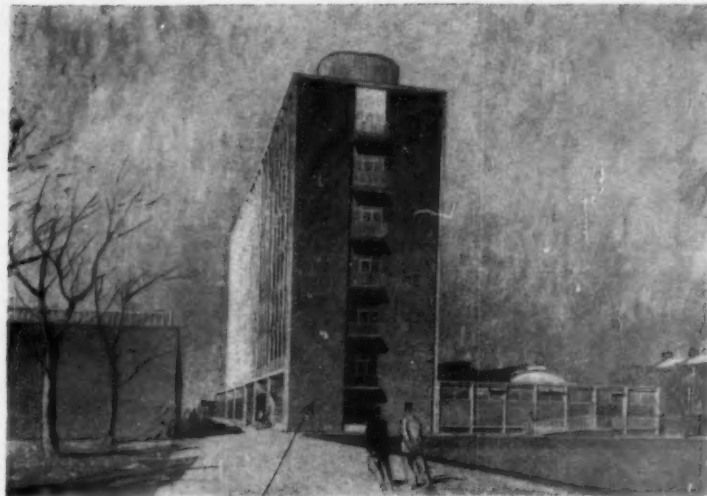


### STORES, CANTEEN AND OFFICES: BEXLEYHEATH

Arthur Bailey (Ansell and Bailey)

For the London Electricity Board, on a site already partly occupied by electrical installations and part of which is reserved for future transformer equipment. The new buildings accommodate several stores departments, a meter-testing department, petrol supply and building stores, and provide a canteen to serve the whole area and offices. Work began last September.

Planning was influenced by the large amount of motor traffic that will be brought on to the site: the arrival of equipment in bulk from manufacturers and its subsequent redistribution. The accommo-



dation is planned in single-storey buildings around the perimeter, with one multi-storey block in the centre.

The multi-storey block is in reinforced concrete with brick cladding. The storage departments have steel frames (giving clear spans of up to 76 ft.) with brick cladding, except for the meter-testing and storage department which is reinforced concrete with a shell-concrete roof. This department only is artificially ventilated by a plenum system.

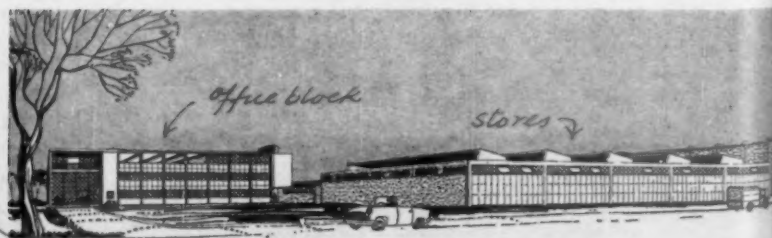
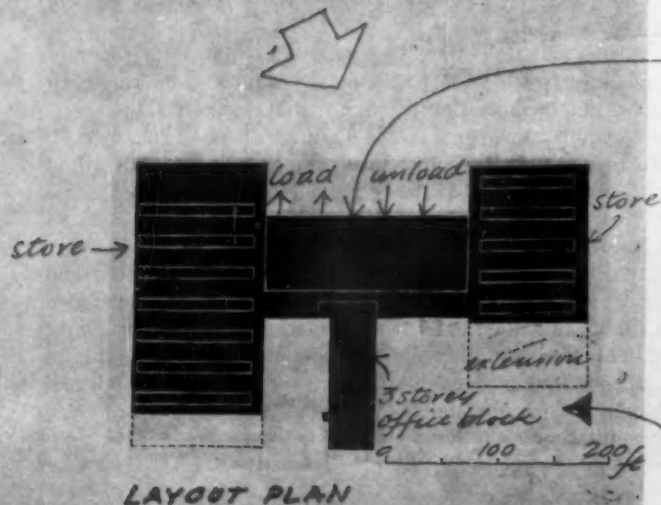
### SUPPLIES DEPOT: CHELMSFORD

H. Conolly (Essex County Architect)

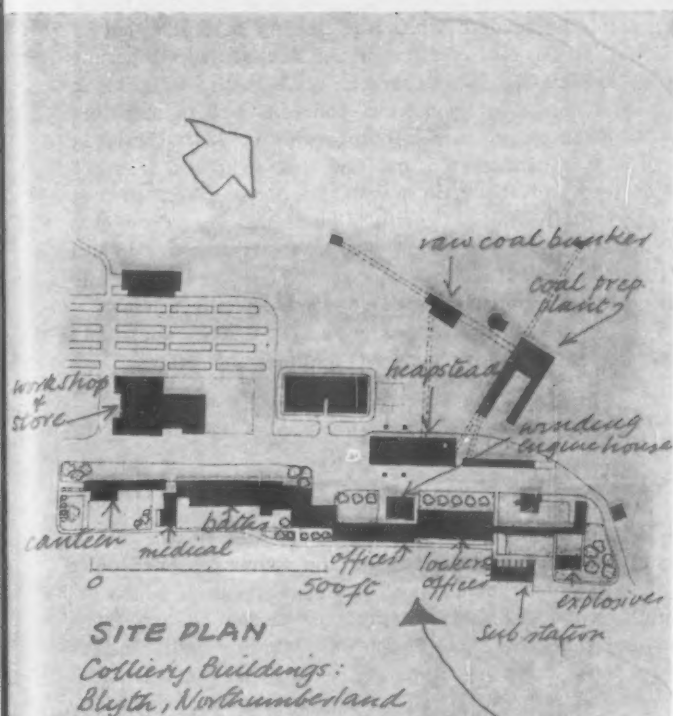
To house the headquarters staff of the Essex County Supplies Department, which deals with the purchasing and distribution of the equipment, furnishings and food supplies for all county council buildings. On a 3-acre site on the Widford industrial estate. It is hoped to start building this year.

There is a central 3-storey office block and central single-storey receiving and despatch area. On either side are large stores, a printing shop, and a garage for transport vehicles. Allowance has been made for possible future extensions of the stores. There is a canteen and caretakers' flat on the top floor of the office block. A roof garden between them allows space for possible extensions.

The buildings have a precast reinforced concrete frame sup-







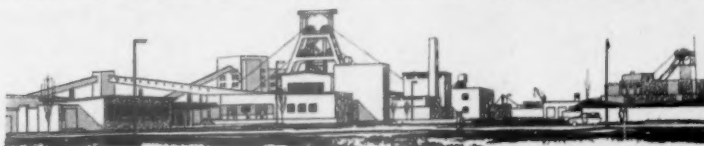
porting a light roof. Monitors running east and west provide light for the whole of the single-storey area. This lighting is supplemented by high-up windows to some of the stores. External walls are mainly brick but exposed aggregate concrete slabs are used along the street front, and glass walling in the offices.

Deputy County Architect: D. Senior. Assistant County Architect: K. D. Box. Assistant Architect: R. F. S. Fenton.

## COLLIERY BUILDINGS: BLYTH, NORTHUMBERLAND

Watson and Coates

For the National Coal Board: required for the modernization of the Bates Colliery, which was started 80 years ago but still has coal available at some distance from the original shaft. This will be worked from a new shaft. The pit-head buildings are being constructed in three stages. The first (comprising engine-house and canteen) is already complete. The second (comprising the heapstead, coal-preparation plant, central boiler-house, stores and workshops) has just started. The third comprises offices, lamp-rooms and explosive stores. New



pithead baths (by another architect) are also already in existence.

The new buildings, though separate structures, are grouped together as far as possible. The southern part of the site has been planned as the 'clean' side and is separated from the working side by a belt of trees and grass. The buildings on this side are of brick, to fit in with the existing pithead paths. The other buildings are steel framed clad with asbestos.

Engineers: Mott, Hay and Anderson.

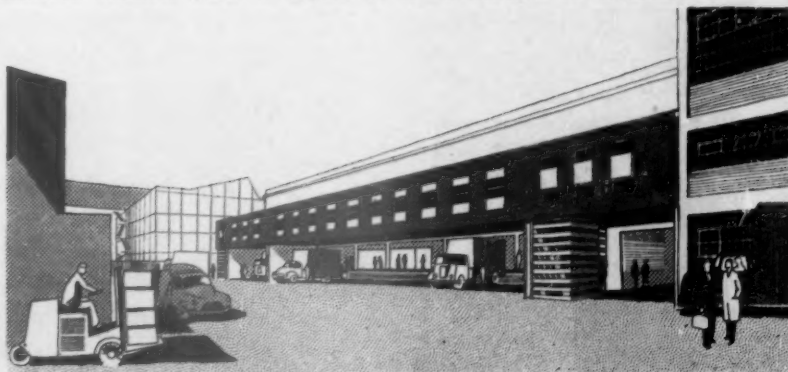
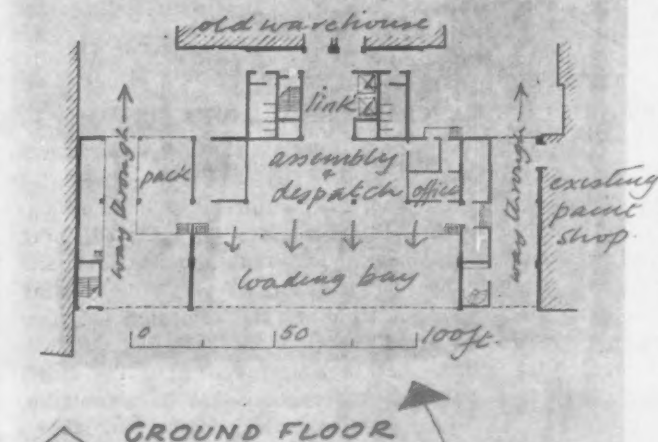
## WAREHOUSE AND OFFICES: BATTERSEA

J. M. Austin-Smith and Partners

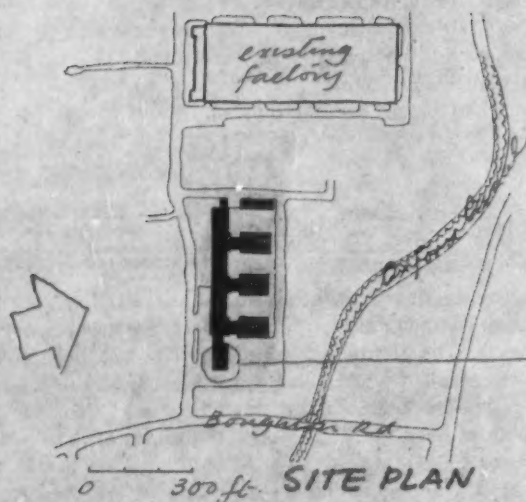
A 3-storey warehouse for the storage of paint together with ground-floor loading bays, with offices over. Construction began a year ago.

The new building connects at all floor levels with an existing paint factory, to permit filled tins to go direct into the warehouse for storage, and then by vertical chutes to loading bays at ground-floor level. Full production of the existing factory had to be maintained and two vital roads to the rear of the new warehouse are being kept open through the building during its construction.

Heavy loading of the upper floors and the low bearing capacity of the river-side site necessitated use of concentrations of bored reinforced concrete piles to depths of 50 ft. beneath all columns.



## 9. INDUSTRIAL BUILDINGS



The narrowness of the road to which the loading bays face led to the elimination of all but four columns on the street façade to permit easy access for lorries. The front and rear walls to the office block at first-floor level consist of reinforced concrete girders spanning along the road frontage to a maximum width of 92 ft. between columns, with a 20 ft. cantilever at one end. The structural frame is reinforced concrete and the main warehouse floors are of precast concrete trough units resting on in situ filler beams. The rear elevation is brick infill panels and the main walls of the front are of in situ concrete with an exposed granite aggregate. There are white tile or porcelain enamelled infill panels above and below the windows.

Partner in charge: Geoffrey Salmon. Engineers: F. J. Samuely, and G.K.N. Reinforcement. Quantity surveyors: Young and Brown.

### RESEARCH LABORATORY: RUGBY

W. S. Hattrell and Partners

For the British Thomson-Houston Company. The 10-acre site is immediately to the north of, and adjoins, the company's head office and works. The building replaces the existing laboratories which are in older buildings and in dispersed temporary accommodation. Some of the latter, adjacent to the site of the new building, will continue to be used for some time in conjunction with it, as construction is phased over a period of years. It is hoped to begin work on the first stage early this year.

The buildings consist of laboratories and laboratory offices in a 360-ft. long 3-storey block with an administrative unit at the east end containing main entrance hall, lecture room, library, conference rooms and offices. A car park lies directly behind. Eventually three wings running north will join the main block, each of the junctions being identical in plan and containing staircase, lavatories, cloakroom and main vertical service ducts. The service entrance is at the west end of the main block, with sub-station and generating plant house, all main services being distributed through a walkway duct running under all laboratory blocks.

The building is of reinforced concrete frame construction with columns at 4 ft. centres. Windows are double.

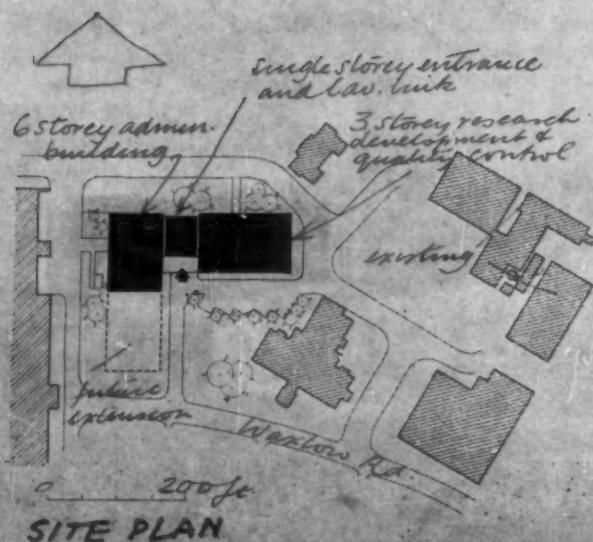
### OFFICES AND LABORATORIES: HARLESDEN

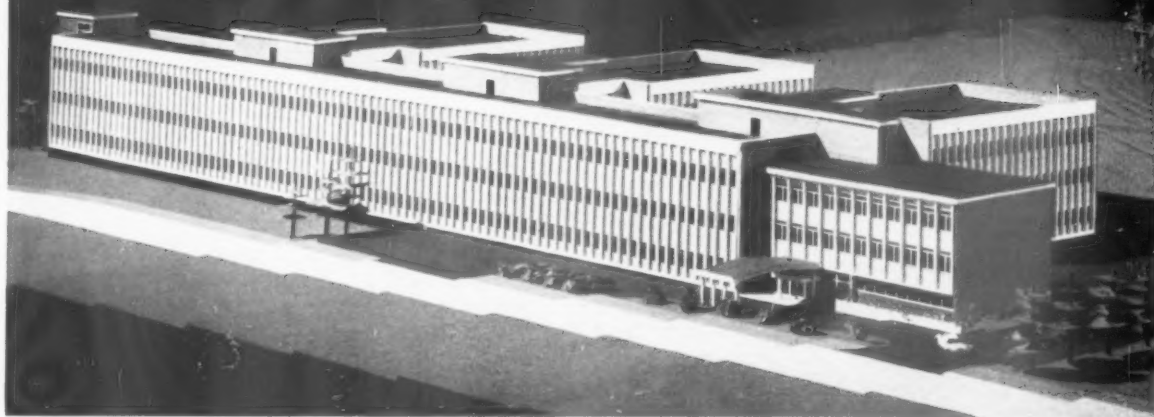
J. Douglass Mathews and Partners

A headquarters administrative building, with research and development laboratories, for the H. J. Heinz company on a site adjoining the company's factory, but with independent traffic circulation. The site is an open area at present laid out as gardens between the existing factory building and a canteen building. The company's playing-fields are on the north. It is hoped to begin work this summer.

The layout of the scheme has been reviewed since the model illustrated was made, and the present proposal is that the laboratories, occupying two storeys, should be superimposed on the four storeys of offices. A seventh floor will contain a directors' suite (with boardroom, dining-room, kitchen, etc.) and the ventilating plant, and this will be crowned by a penthouse containing lift-motors and tanks. The 6-storey block has a central core containing lifts, stairs and lavatories with private offices on two sides of it and large general open spaces at the ends. The laboratory floors are similarly planned to give maximum flexibility, with small laboratories on either side of the central core and large laboratories at the ends.

The block has a reinforced concrete frame with two-way floor slabs beneath which is a false ceiling. The main module is 8 ft. External cladding is glass, curtain wall mullions and transoms are anodized aluminium. It is intended that the block shall be air conditioned.





*Left, research laboratories at Rugby, by W. S. Hattrell and Partners. The lower wing at the right-hand (east) end of the main block contains administrative offices.*



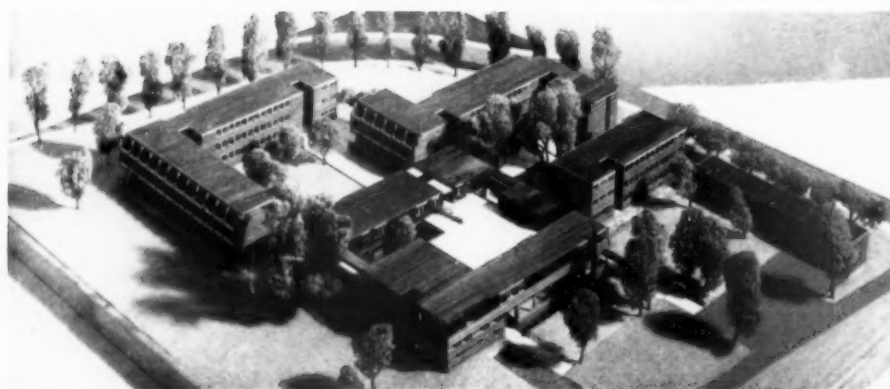
*Offices and laboratories at Harlesden, by J. Douglass Mathews and Partners. Above, showing the two blocks situated between the existing factory (left) and canteen building (right). Right, the new blocks from the south. The office block (left) and the laboratory block are linked by a common entrance. Since this model was made, an alternative arrangement with the laboratories above the offices has been worked out—see notes on facing page.*



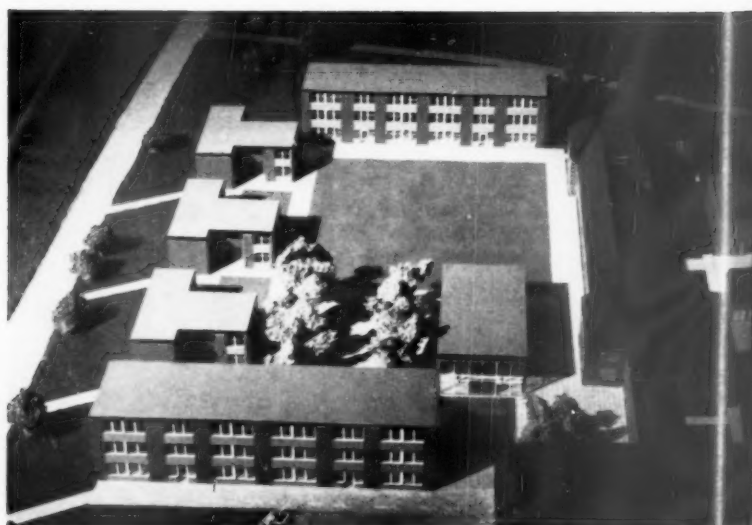


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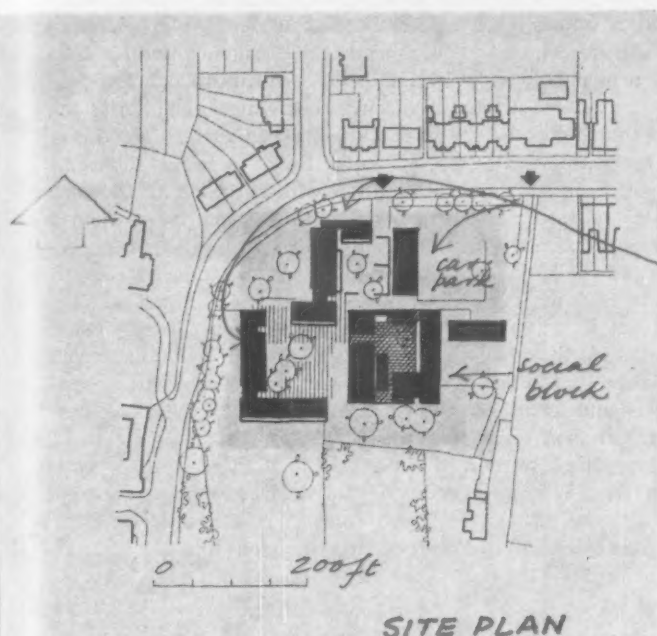
## HOSTELS



*Hostel for women students of the University of Leicester, by J. L. Martin in association with Trevor Dannatt. Left, from above, showing the residential blocks surrounding two courtyards, separated by social buildings and approached through a third. Above, from ground level, looking into one of the courtyards from the south.*



*Buildings for Cranfield College of Aeronautics, by Stillman and Eastwick-Field. The long block in the centre is the common-room; the others contain study-bedrooms.*



## WOMEN'S HOSTEL: LEICESTER

J. L. Martin in association with Trevor Dannat

A hall of residence for women students at Leicester University, accommodating 162 students in residence and with dining space for 230, allowing students living in adjacent university houses to dine in hall. The site is at Knighton, an inner suburb within reasonable distance of the faculty buildings. Work will begin this year.

Three 3-storey residential blocks containing study-bedrooms of various types enclose two linked courtyards of which a 2-storey social block forms the fourth sides. The east-west wings have rooms with balconies facing south, and bathrooms, etc., facing north. The north-south wings have rooms facing both east and west, with bathrooms, etc., at either end of a central corridor. Staircases, service rooms, ironing rooms, etc., are disposed so as to break corridors into short lengths with changes of direction and variations of lighting. The social block has an open internal court beyond the entrance hall on the axis of the pedestrian approach through the first courtyard. On the west side of the court are the junior common-room and the library; on the east the dining-hall and senior common-room. The upper floor of this block contains residential accommodation for senior members and a warden's flat. Over the service side are residences for the bursar and senior staff. There are also recreation rooms opening on to a first-floor terrace. A separate 2-storey block houses domestic staff.

The residential blocks are of load-bearing brick cross-wall construction with concrete floors. The social block, requiring larger spaces, has a concrete frame for the lower storey and load-bearing block walls above. All roofs are timber.

Consulting engineers: Lawrence Kenchington and Partners. Quantity surveyors: Monk and Dunstone.

## BEDROOMS AND COMMON-ROOM: CRANFIELD

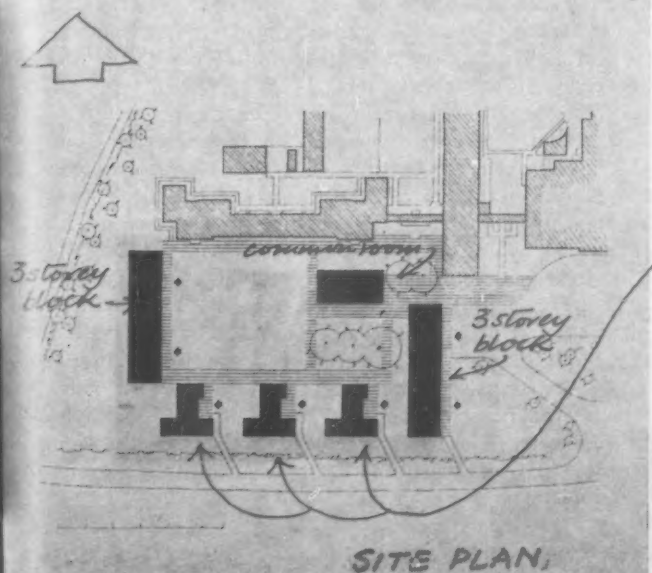
Stillman and Eastwick-Field

Extensions to Lanchester Hall at Cranfield College of Aeronautics. The scheme provides 120 study-bedrooms and a common-room for 250 students on a site adjoining the existing (Georgian style) buildings. Construction will start this spring.

The rooms are in two 3-storey blocks facing east and west, each containing 42 study-bedrooms, and a row of three T-shaped 2-storey blocks, each with 12 study-bedrooms. The common-room occupies a separate block. Each study-bedroom has an area of 150 sq. ft. In the two main blocks they are arranged in groups of 7, each group with its own staircase and a utility room, 2 w.c.s, bath and shower. There is an emergency fire exit between the two groups on the upper floors.

Construction is load-bearing brick with precast concrete floors. Cill walls are untreated cedar boarding backed by brickwork. Windows are wood, sliding vertically. Partition walls are brick to give sound insulation between the rooms.

Quantity surveyors: Harry Trinick and Partners.



## 10. HOSTELS

### HALLS OF RESIDENCE: IMPERIAL COLLEGE, LONDON

Richard Sheppard and Partners

In Princes Gardens, South Kensington, across Exhibition Rd. from the Imperial Institute site, where the Imperial College of Science is in process of expansion. The halls are planned on three sides of the existing square. Traffic will continue to use the north side (linking Exhibition Rd. with Ennismore Gardens) but it is hoped to close the other roads and preserve the quiet atmosphere with the help of the existing lawns and trees. The halls on the east and south sides will comprise the first stage. No starting date has yet been fixed.

There are thirteen 8-storey halls altogether, four on the east side and four on the south (each accommodating 108 students), and five on the north side of which two accommodate 108 students, two 140 and one (an independent block) 70. The halls on each side, though planned as separate units, are structurally continuous. Internal galleries at ground- and fourth-floor levels connect the staircases which serve the bed-sitting rooms, of which there are normally 24 to each staircase—eight per floor. Each floor is self-contained, with bathroom or shower, w.c. and a small store. At gallery level there are flats for wardens, common-rooms, etc. On the south side of the square, in a single-storey building behind the halls, are a dining-room and cafeteria capable of serving up to 1,800 meals, a snack bar, lounges and club-rooms. The kitchens are at lower ground level with access from Princes Gate Mews. On the north side is a sports section, with swimming-pool, rowing-tank and squash and fives courts; also a club-room with access to the gardens and terraces at the back. At the back of the east block is a car park with road access from the south.

The structure is a reinforced concrete frame faced with precast concrete sections. Window panels to study-bedrooms are steel and hardwood with infill below cills of coloured glass with concrete backing. Where brick walls occur they are of London stocks.

### SCHOOL OF NAVIGATION: WARSASH, HANTS

Richard Sheppard and Partners

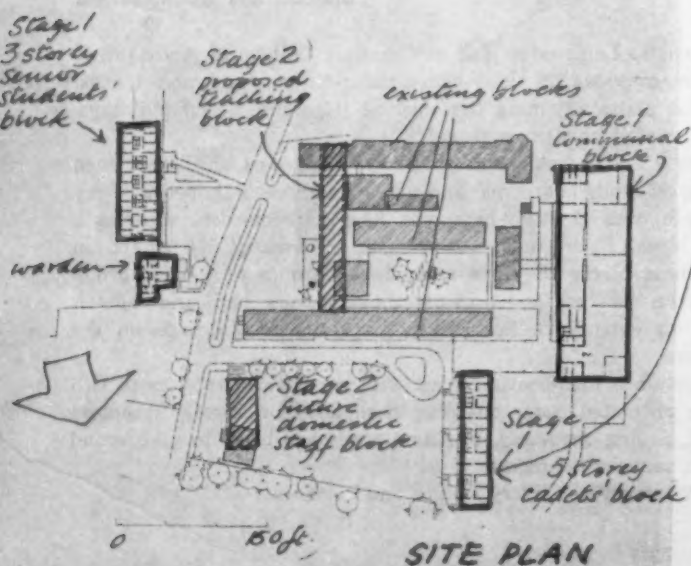
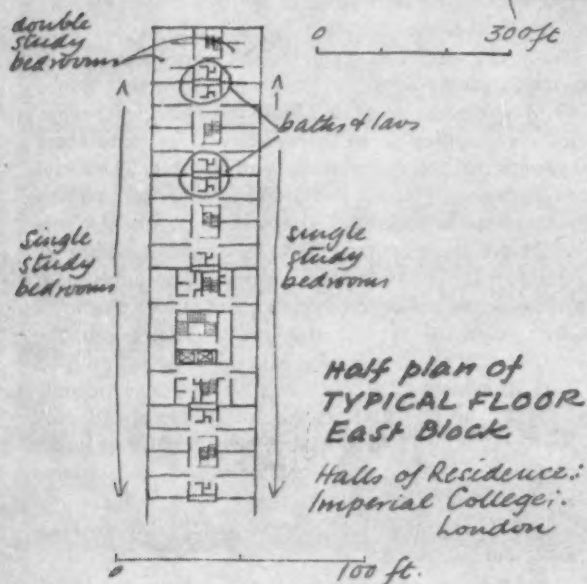
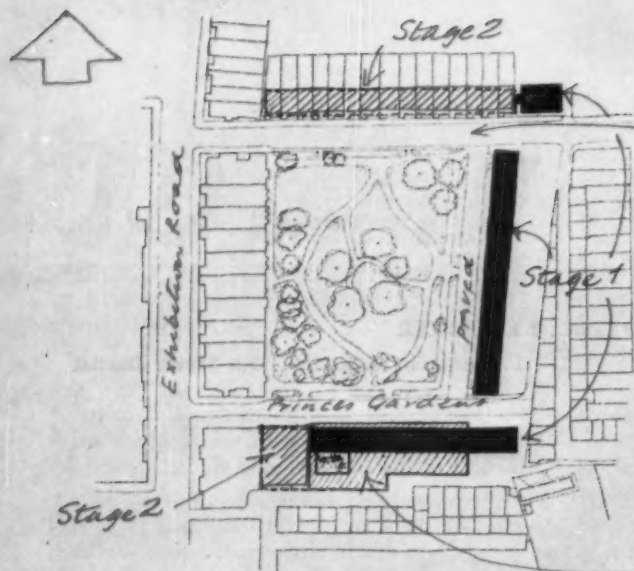
A department of Southampton University. It is at present contained in a straggle of first- and second-war barrack blocks, on rising ground on the east shore of Southampton Water.

The existing buildings are structurally sound, and the requirement was to retain as many of them as possible, and to build on the limited land around them quarters for 130 cadets, 70 Merchant Navy short-course students, dining-halls and common-rooms to accommodate the cadets, staff and guests, and 180 senior students, and domestic staff quarters; also to replan the teaching and administrative accommodation as far as possible within the existing buildings. Work on the first stage will start early this summer.

The planning of the 5-storey cadets' block consists of groups of different sized 'cabins' for one, two and six cadets, each group forming a duty watch. The six-berth 'cabins' are planned as long narrow rooms running right through the block, and the block itself is subdivided into three completely self-contained 'houses', each with three floors of cadets' 'cabins', one floor containing common-rooms and oilskin and drying-rooms, and one floor containing the divisional officer's flat. The roofs of this and the senior students' block will be used for instrument instruction, lookout posts and radar observation.

Structurally, the block consists of a series of cross walls at alternating 11-ft., and 22-ft., centres, forming a strong façade pattern which emphasizes the internal house divisions.

Consulting engineers: Clarke Nicholls and Marcel. Heating and electrical consultants: Oscar Faber and Partners. Quantity surveyors: E. C. Harris and Partners.

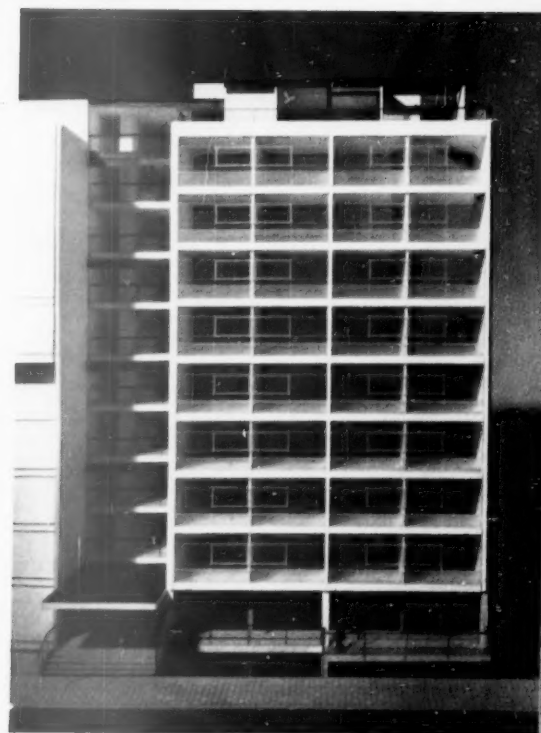
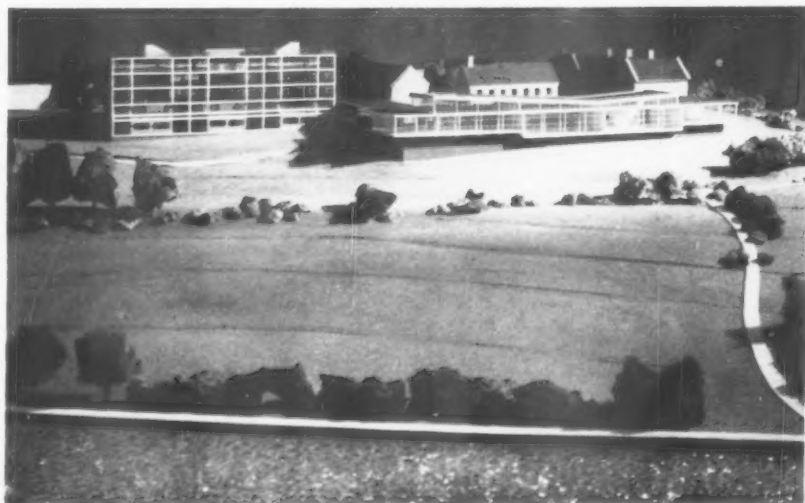






*Halls of residence for the Imperial College of Science, South Kensington, by Richard Sheppard and Partners: above, the whole scheme from the north, showing the existing square enclosed on three sides by the ten-storey hostels, planned vertically with gallery floors at ground and fourth floor levels; right, detail of the Princes Gardens front of the smaller north-east block.*

*Below, new buildings at the School of Navigation at Warsash, also by Richard Sheppard and Partners: on the left a five-storey cadets' block; on the right (with the existing buildings beyond) the communal block.*



# 11

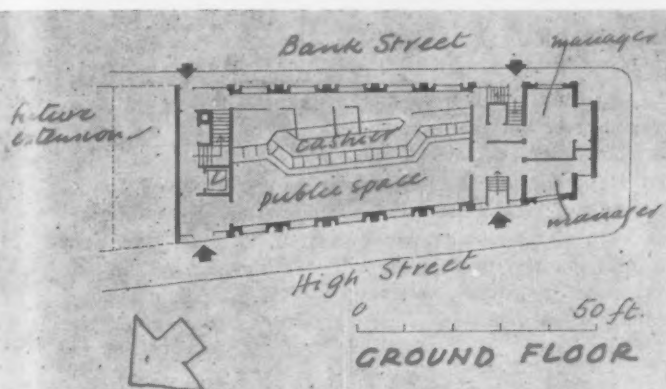
## COMMERCIAL BUILDINGS

*Right, bank building in the High Street at Maidstone, by William Halford and Partners, showing use of Kentish flint, dressed stone and dark purple-blue bricks.*



*Below, wholesale market at Sheffield, also by William Halford and Partners.*





## BANK: MAIDSTONE

William Holford and Partners

For Barclays Bank, whose building in the High Street at present occupies a confined site between this broad thoroughfare and the narrow Bank Street to the south. A further widening of the High Street will reduce the width of the building plot to 25 ft. at the west end, where it faces the bridge and the road from London. The new bank will occupy the whole of the wedge-shaped site from this point for a distance of about 105 ft. up the hill. Work is expected to start this summer.

The building accommodates the usual type of banking hall, with managers' rooms adjacent, machine-room above and strong-rooms below. In addition there are the offices and directors' rooms of Barclay's local head-office, and accommodation for the Trustee Department on the third floor.

The narrow but commanding site was thought to demand decisive modelling and fairly strong contrasts of colour. The traditional Kentish flint is therefore used for walling, together with light-coloured dressed stone, and dark purple-blue bricks. Window frames are copper-bronze. The black-and-white theme is carried into the roof structures also, which incorporates flues, lift overruns and tanks.

Quantity surveyors: Grimwade and Ainsley.

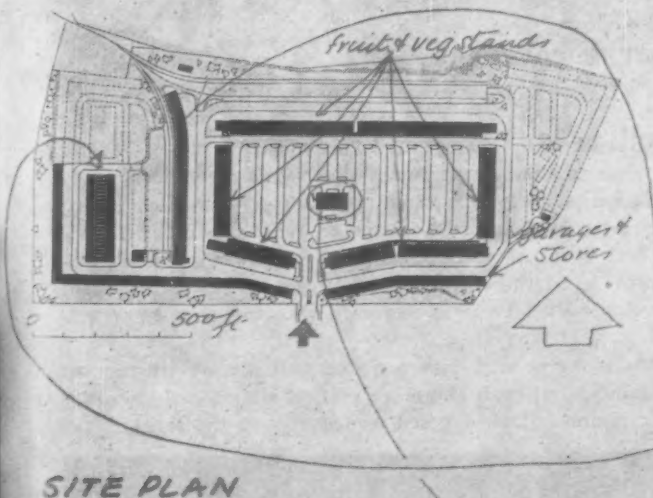
## WHOLESALE MARKET: SHEFFIELD

William Holford and Partners

On a site about 1½ miles from the city (east of the Nunnery Colliery and between the Darnall railway sidings and the Rotherham by-pass) to which the city of Sheffield is moving the wholesale markets for fruit, vegetables and fish from the present congested Castlefields site in the centre. Site work started last November and building will begin about July next year after a consolidation period required by the difficult nature of the ground.

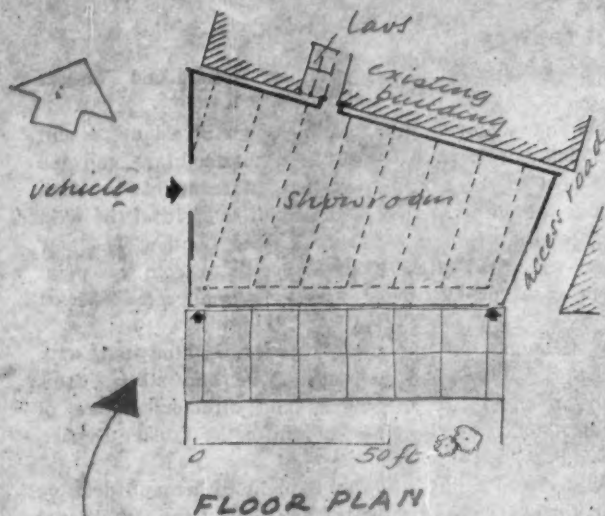
There are 135 fruit and vegetables units, to be occupied by about 80 firms—some taking two or more units. A separate banana-ripening shed is provided with a railway spur alongside so as to allow unloading directly from truck to shed. The fish market is likewise a separate building, consisting of 41 stands, to be occupied by about 20 firms. This is also served by its own railway siding and platform, and the wholesalers pick up from this to deliver the fish to their own stands.

Circulation is one-way: the retailers park inside the rectangle of stands and as the retailers go the rounds deliveries are carried direct to their vans. The wholesalers circulate round the outer perimeter of the stands and deliver at the rear. All road traffic is controlled from a gatehouse at the main entrance. On the north side of the site a low-level railway siding serves the fruit and vegetable wholesalers and the wagons can also act as short-term storage space. In the centre is an administrative block with a restaurant, three banks, a shop, and





## 11. COMMERCIAL BUILDINGS



a number of offices. A clock-tower stands in front of it. The lines of garages are intended not only to house the wholesalers' vehicles, but to provide additional storage space for goods not required in the stands, and for crates returned empty.

To reduce costs, structures (except the central building) are more or less standardised, with light steel frames, aluminium roof decks, cavity walls of brick and precast slabs, and roller-shutter doors.

Partners responsible: W. M. Shennan and George Gardiner. The scheme prepared in collaboration with S. L. Womersley, Sheffield City Architect, and M. O. Garner, Sheffield Markets Superintendent. Quantity surveyors: Dansken and Purdie.

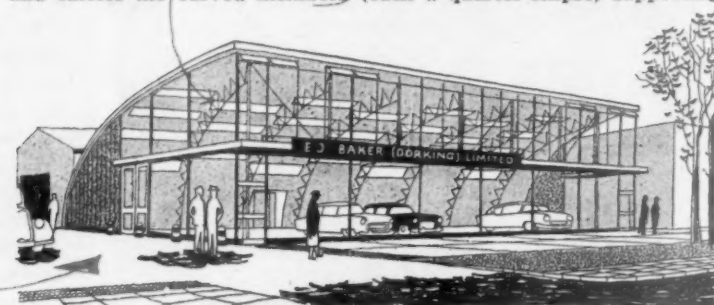
### MOTOR SHOWROOMS: STAINES

Westwood, Sons and Partners

On an irregular site, at the east end of the town on the main London road. Construction began in October.

The design is based on the need for the cars displayed to be clearly seen, requiring large unobstructed windows and the minimum of reflections. Vertical, not sloping, windows were, however, asked for.

The frontage is spanned by a single lattice girder carried on two tubular stanchions. The girder is stiffened by the projecting canopy and carries the curved members (each a quarter-ellipse) supporting



the roof. Each of these has a different span owing to the irregular shape of the site. The roof is covered with aluminium and perspex sheets, lighting the interior strongly to reduce reflections. The ceiling is of sprayed asbestos to give a jointless surface.

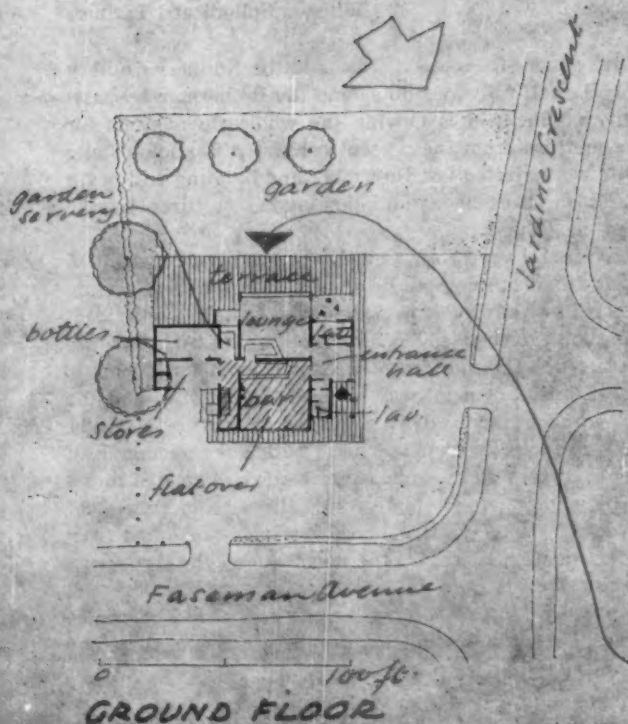
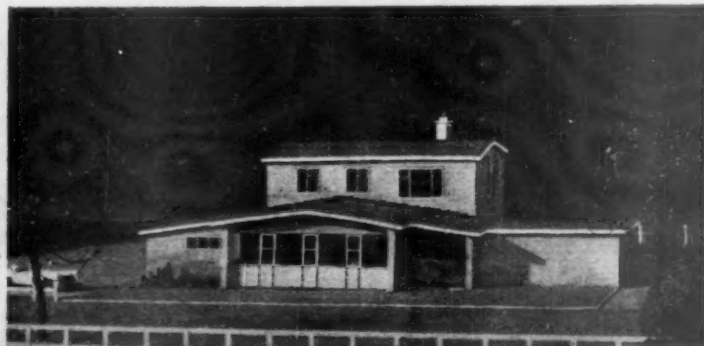
### PUBLIC HOUSE: COVENTRY

W. S. Hattrell and Partners

For Bass, Ratcliff and Gretton, in the new district centre at Tile Hill, on the western edge of the city. Work begins early this year.

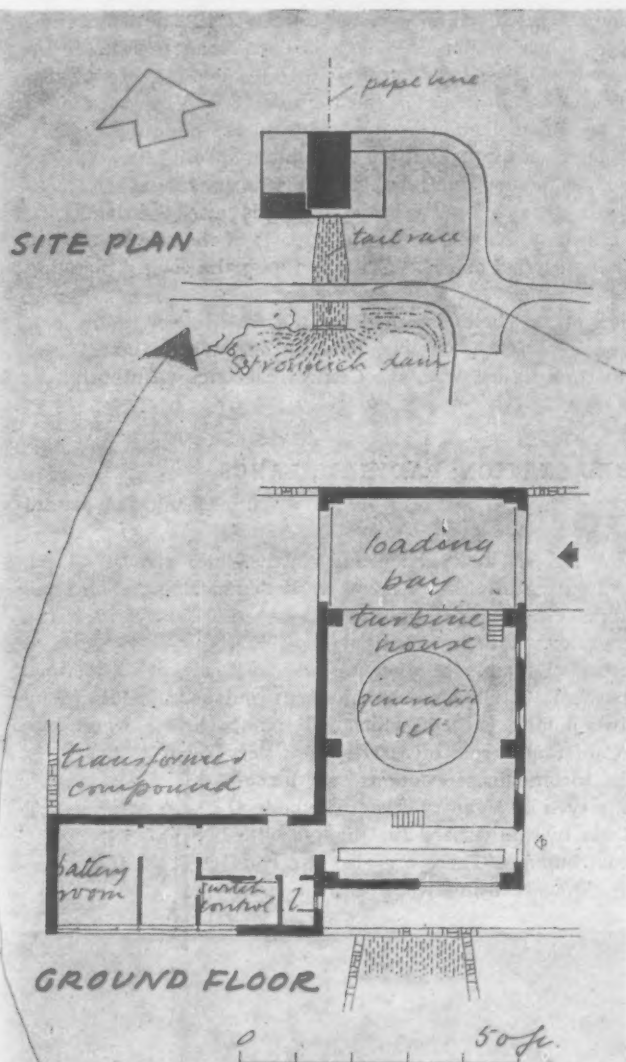
Accommodation comprises basement cellar and heating chamber; bar, lounge and bottled goods store on the ground floor, and manager's flat on the first floor. As there are only two public rooms, it was possible to provide a large entrance lobby, from which the lavatories are reached. A garden servery is combined with the off-sales department.

Construction is the normal domestic kind with timber trusses and a green bituminous felt roof. There are vertical sliding sash windows in the public rooms and an exposed timber roof in the lounge.



# 12

## POWER STATIONS



### HYDRO-ELECTRIC STATION, CASHLIE, PERTSHIRE

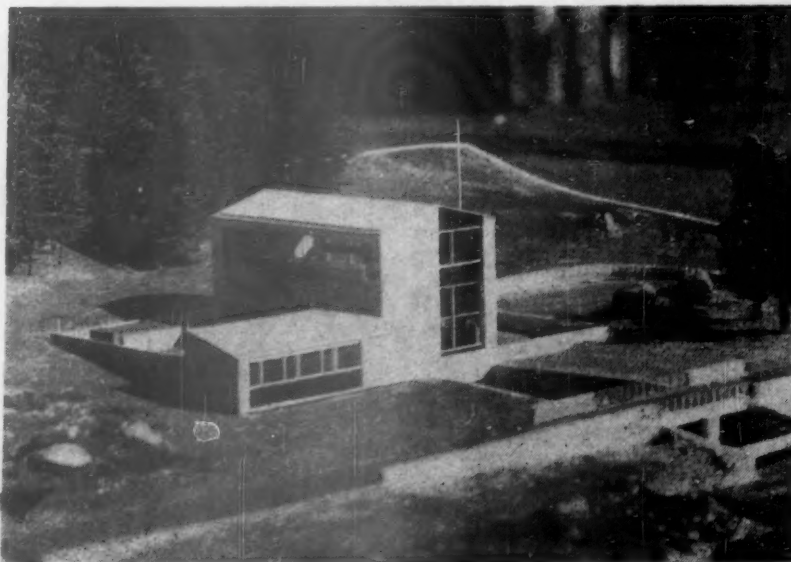
Robert Matthew and Johnson-Marshall

For the North of Scotland Hydro-Electric Board: preliminary design for the third of three stations comprising the Killin section of the Breadalbane power project, the other two, at Glen Lochay (see AR January preview issue, 1956) and Lubreoch being in a more advanced stage. Work on the foundations has already begun.

The site is on the north side of a reservoir and immediately upstream from the Stronach dam in Glen Lyon. The water, providing an average output of 23 million units per annum, flows through a 2½ mile tunnel and a 1,100 ft. steel pipe from the Giorra dam. A public road crosses the tail-race between the station and the reservoir. The pipe-line descends the hill north of the station, passing between two conifer plantations which will be extended to screen it. The turbine-house (containing 11 kW. turbine with overhead crane) and loading bay are placed centrally on the axis of the pipe-line and the tail-race that discharges water into the reservoir. Lower blocks contain control and equipment rooms and there is an open transformer compound surrounded by a high stone wall.

The concrete for the tail-race is poured behind a permanent shuttering of stonework. The external walls of the buildings are of rough light-coloured stone quarried near the site, backed by an inner skin of concrete. Internally the walls above the crane-rails and the ceiling are lined with hardwood. The remainder of the walls are painted concrete. Windows are timber with aluminium opening sections. The entrance door to the loading bay is teak.

Senior architect: T. Spaven. Assistant architect: R. Thurgarland. Consulting civil engineers: James Williamson and Partners. Consulting mechanical and electrical engineers: Merz and McLellan. Quantity surveyors: Phillips, Knox and Arthur.





## 12. POWER STATIONS

### ATOMIC POWER STATION: HINKLEY POINT

Frederick Gibberd

For the Atomic Energy Authority: the largest nuclear power station so far projected, with an output of 500 mW. The reactors are of the gas-cooled graphite moderated type. The site, of 25 acres, is on the south shore of the Bristol Channel. Site-work has already begun.

There are two reactors, each consisting of a 24-sided core of graphite blocks with a lattice of vertical channels containing the uranium fuel, all enclosed in a spherical pressure vessel 67 ft. in diameter. This is of 3 in. mild steel plates, welded on the site. Each reactor is connected to six heat exchangers (the steam-raising units), three on either side, enclosed within a glazed screen-wall. The generating plant consists of six hydrogen-cooled turbo-alternators. These are placed in a long turbine hall, parallel to the pair of reactors, with a workshop block at one end. On the far side of this, surrounding a garden, are the administration, welfare and canteen buildings.

Cladding materials throughout are aluminium sheeting and glazing with vitreous enamelled infill panels; as transparent an effect as possible has been aimed at. The architect is also the landscape consultant. Planting and the reshaping of parts of the site by the use of spoil is being carried out in consultation with the county planning officer.

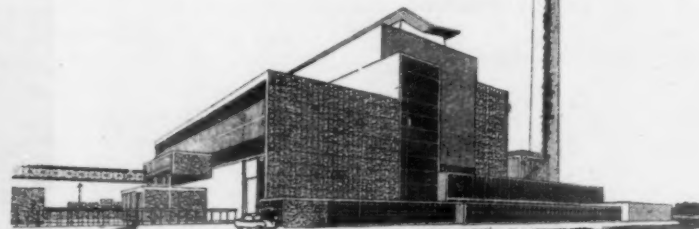
The station as a whole designed by the atomic power projects group formed by English Electric, Babcock and Wilson and Taylor Woodrow, in consultation with the Central Electricity Authority.

### COAL-FIRED STATION: PADIHAM, LANCs

Cruikshank and Seward

For the North West, Merseyside and North Wales division of the Central Electricity Authority. Known as Padiham B, it adjoins the existing Padiham A power station. It will have 240,000 kW. capacity. The first generator will be in commission by 1961.

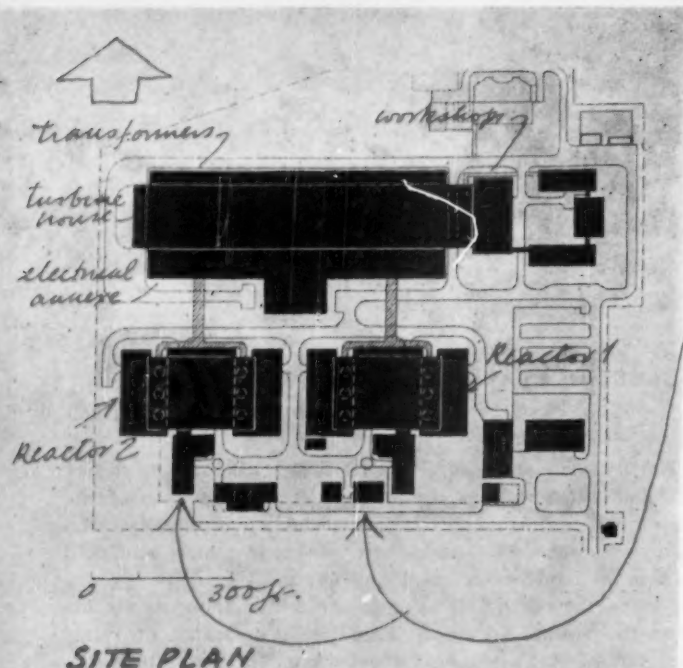
The site consists mainly of riverside meadows subject to flooding. This will be dealt with by an embankment and a drainage system including two pumps, each of which will pump surface water into the River Calder at a rate of 8,000 gallons per minute. The turbine-house contains two turbo-alternators, served by a gantry crane. The boiler-house contains two pulverized fuel boilers with overhead coal bunkers. There are also two concrete cooling towers using water drawn from



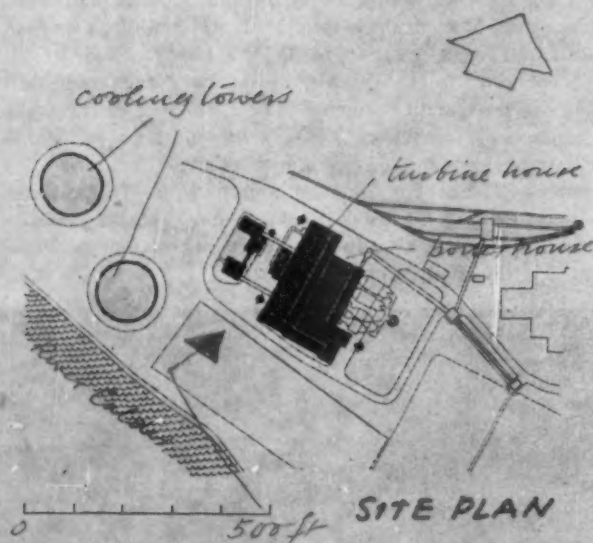
the river at a new pump-house sited near the A station. Administration, control room, laboratories and canteen form a separate group to the east, reached by a covered way and overhead bridge.

Walls of the main buildings are solid, moulded concrete blocks up to a height of 36 ft. Above this they are clad in ribbed aluminium sheeting on a steel frame. The ends of the turbine-house and coal-bunker bays are faced with exposed-aggregate precast slabs. Its west wall consists of a large window, framed by patent glazing and containing a proportion of coloured obscured glass.

Consulting civil engineer: C. S. Allott.

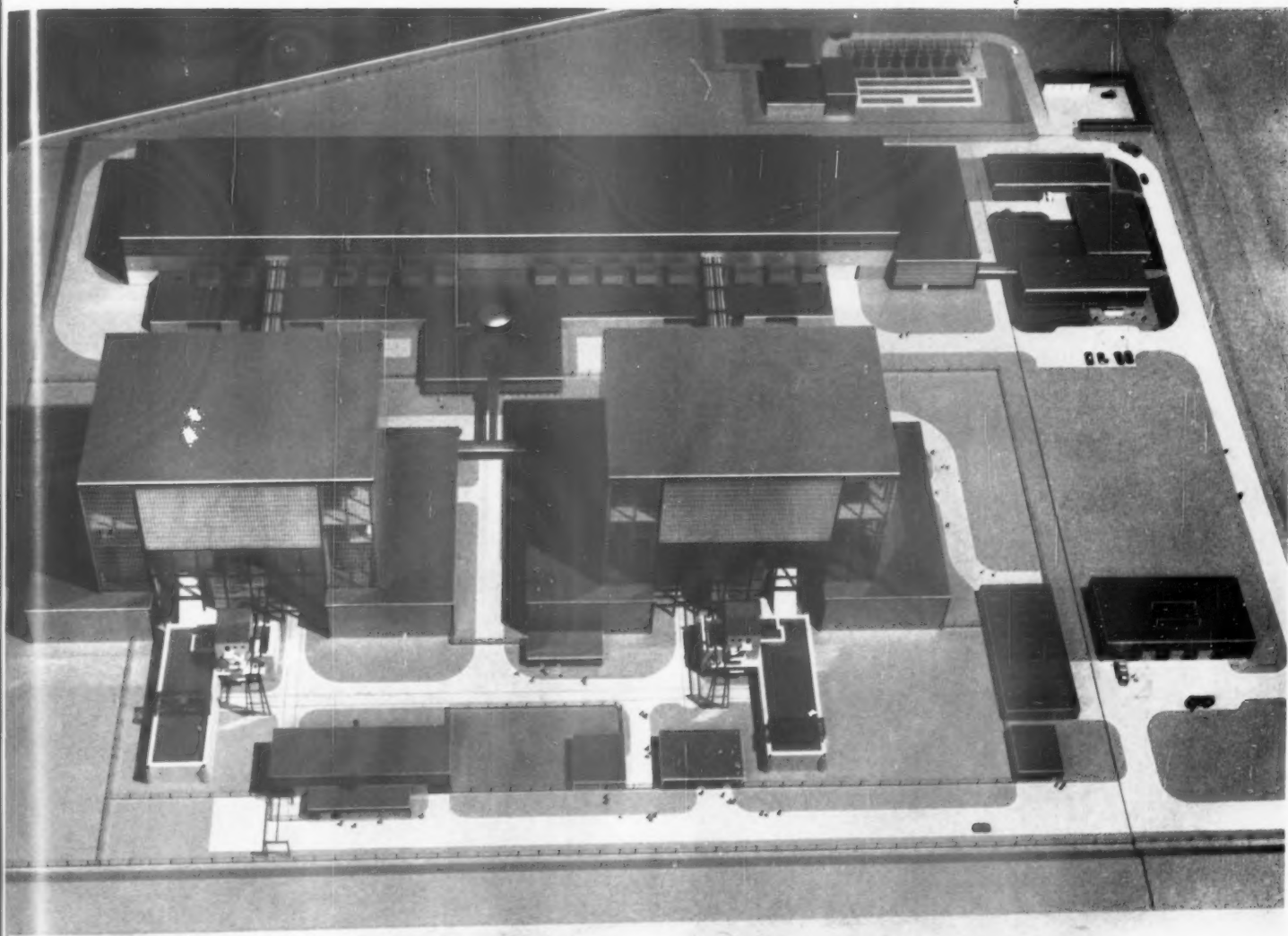


SITE PLAN

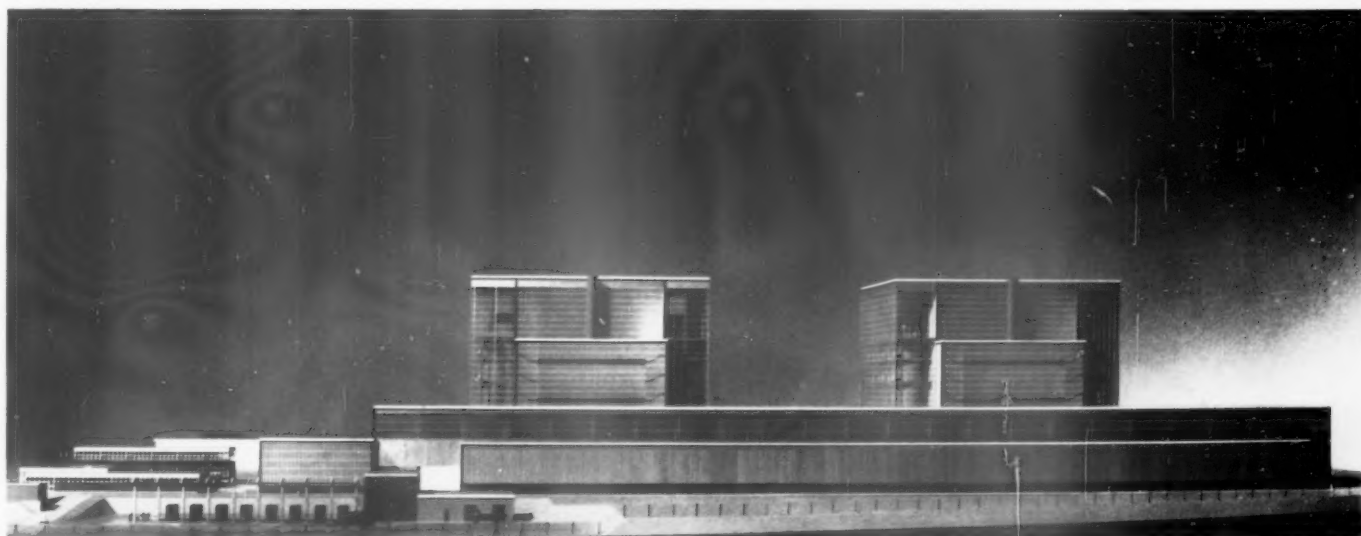


SITE PLAN

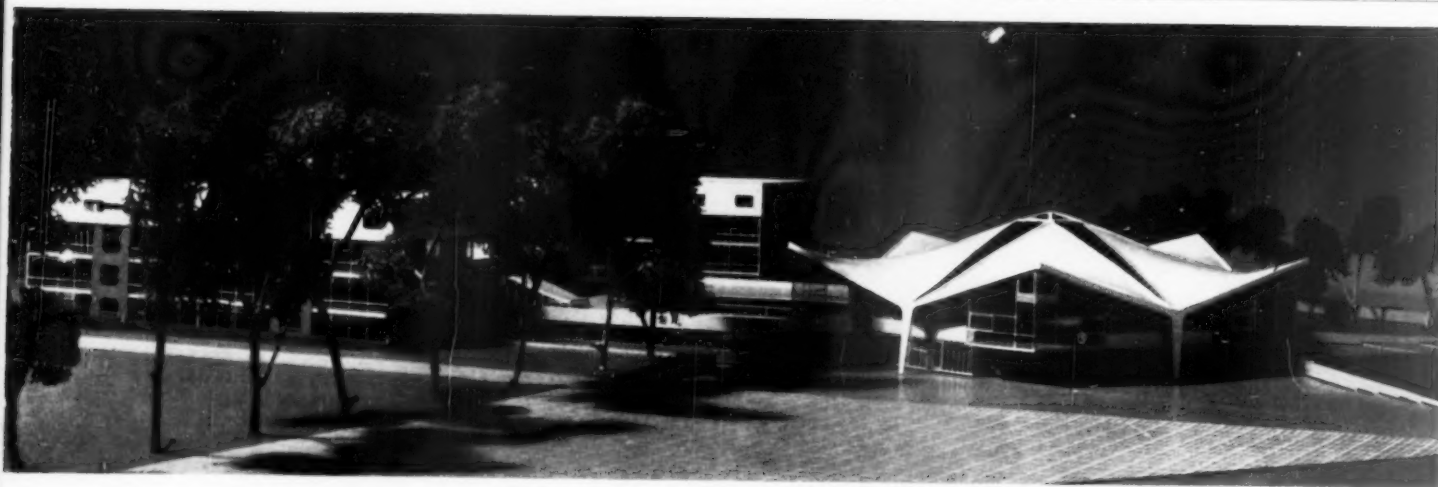




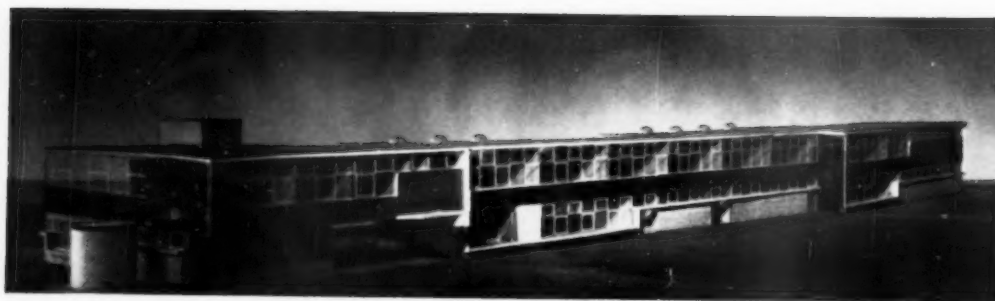
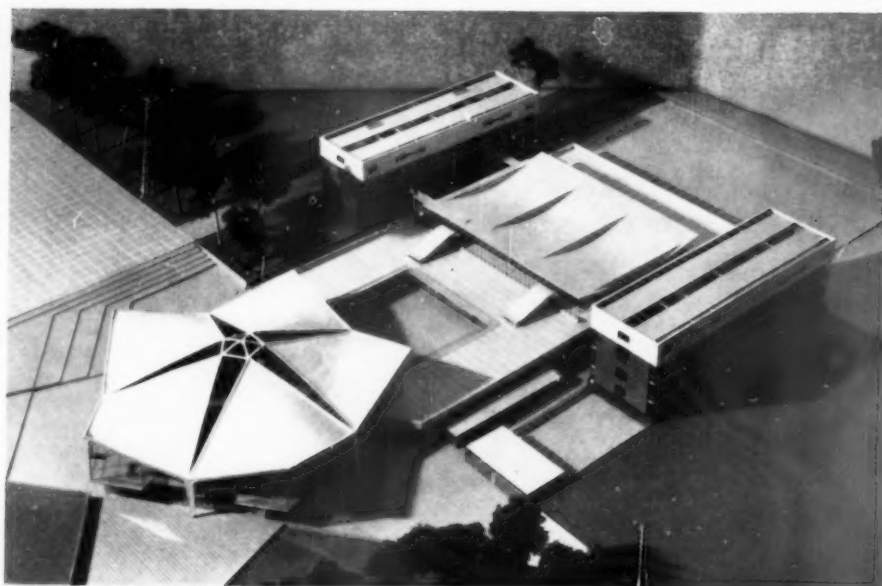
*Atomic power-station at Hinkley Point, Somerset, by Frederick Gibberd. Above, from the south, showing the heat exchangers, clad in clear glazing, on either side of the two reactors. Behind them is the turbine hall. Below, in elevation from the north (the side facing the Bristol Channel).*



# 13 SCHOOLS



*Comprehensive school at Southcark, by Chamberlin, Powell and Bon; above, the pentagonal assembly-hall and (behind the trees) the four-storey classroom block; right, the symmetrical layout from above.*



*Left, Southgate grammar school, by Raglan Squire and Partners, in collaboration with C. G. Stillman, Middlesex County Architect.*

**GIRLS' COMPREHENSIVE SCHOOL: SOUTHWARK**

**Chamberlin, Powell and Bon**

For the London County Council. To accommodate 1,250 girls (on the house system) on a site north of the New Kent Road which forms part of a slum-clearance area and is surrounded by LCC housing of various periods. The buildings are sited in relation to the axis of post-war blocks of flats. Construction will begin this summer.

The buildings consist of a 4-storey classroom block, a 4-storey practical block, a (pentagonal assembly hall) surrounded by five house-rooms, and three gymnasia (en-suite, with folding partitions between and with changing-rooms adjoining an open-air play area). Round a central quadrangle are the staff-rooms, library, kitchen and main entrance hall. In the classroom block the rooms are back-to-back and served by two staircases, eliminating a central corridor. Geography and history-rooms on the top floor are top-lit.

Construction is load-bearing brickwork and steel, with suspended concrete floors and roofs. The assembly-hall roof is composed of five concrete hyperbolic paraboloids separated by roof-lights.

### GRAMMAR SCHOOL: SOUTHGATE

**Raglan Squire and Partners (with C. G. Stillman, Middlesex County Architect)**

A three-form entry mixed grammar school for 540 pupils, including 90 sixth-form pupils. Work will start early this year.

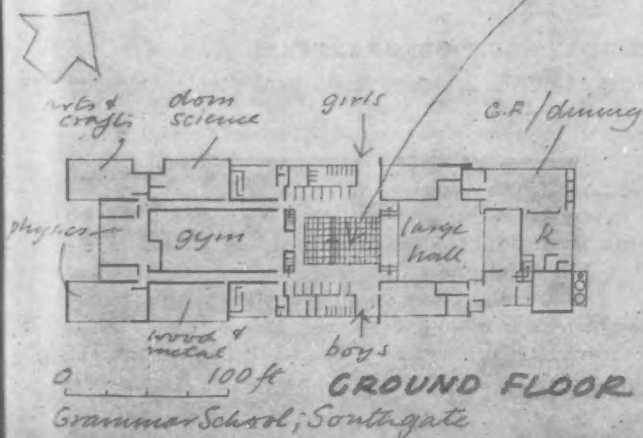
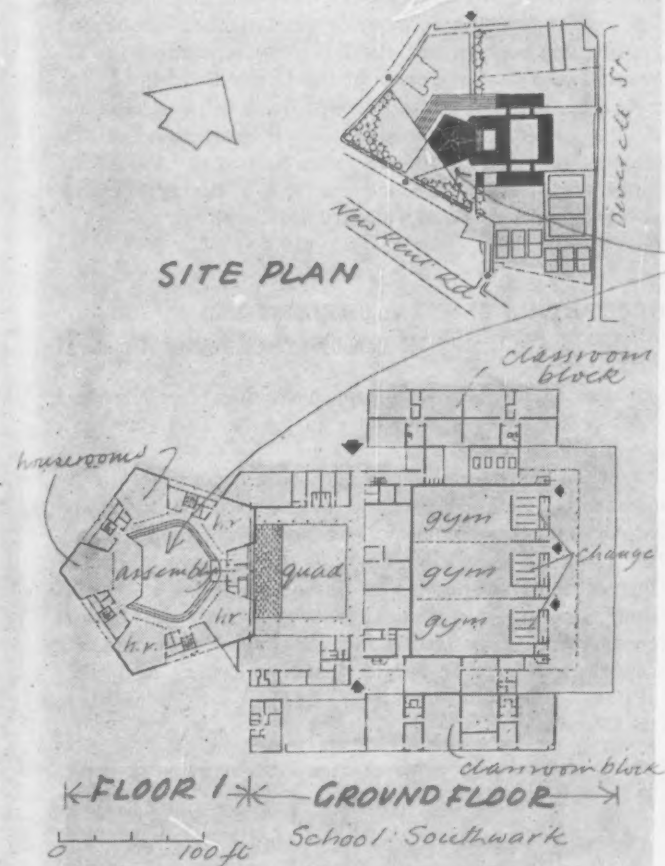
The first floor, in which the main teaching accommodation occupies approximately two-thirds of the area and the remainder is laboratories, is symmetrical in plan. The ground floor is nearly so. It consists of two large double-height elements (hall and gymnasium) separated by an internal courtyard around which a continuous glazed gallery at first-floor level forms the main circulation system of the school, giving access to most of the class and practical accommodation. The hall and gymnasium are lit and ventilated by glass domes, but the hall also has one end opening into the internal courtyard.

Structurally, the building consists of two ranges of reinforced concrete portal frames, closed at one end and linked together across the large, high elements by a stressed-skin plywood roof. Floors are reinforced concrete slabs. Cladding is timber, bolted back to the main structure, with infill panels faced with coloured glass.

## COMPREHENSIVE SECONDARY SCHOOL: TADCASTER

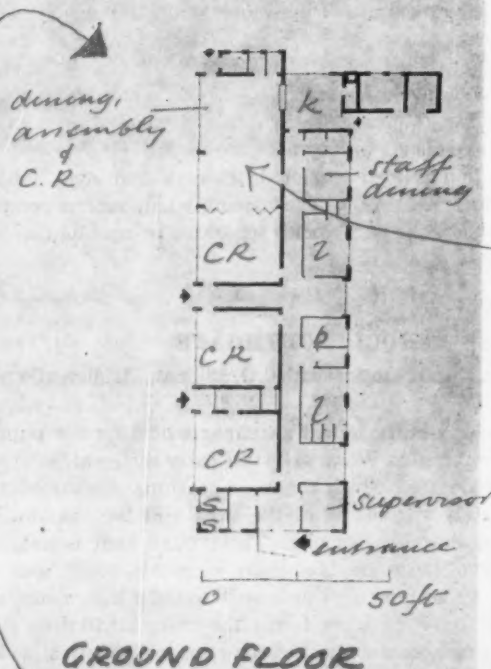
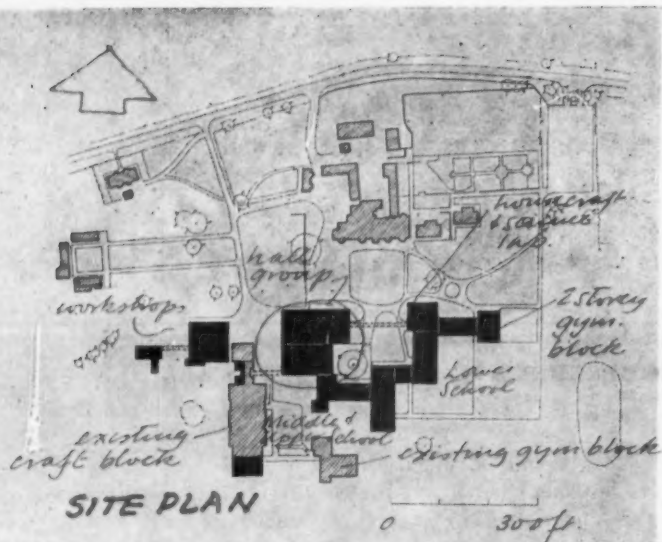
**A. W. Glover (West Riding County Architect)**

A 7-form entry school for 1,200 pupils serving a large rural area in the plain of York. Since the children come from long distances the accommodation had to allow for a 100 per cent demand for school meals. The site is the well planted grounds of a Victorian mansion





### 13. SCHOOLS



which is being used for teaching while the school is building and will eventually become a house for boarders. A gymnasium and practical rooms have already been built to supplement the teaching accommodation in the mansion. Work on the new school began last summer.

The new buildings surround a quadrangle of which the original mansion forms one side. The school is organized educationally into Lower and Upper School and Sixth Form, and socially into house units. Each school occupies a separate 3-storey block with a house-room on each floor. The Sixth Form is separately accommodated over the library. Specialist teaching accommodation (science, handicrafts, housecraft, music, engineering and rural studies) is common to all except for a small amount for the use of the Lower School only for elementary studies. The Lower and Upper Schools have separate gymnasiums. A large hall can accommodate the whole school on speech days, and provide space for 1,500 meals taken in two sittings.

The buildings are of frame construction with a timber cladding system using plywood panels. Solid walls are faced with brick.

#### JUNIOR OCCUPATION CENTRE: CHELMSFORD

H. Conolly (Essex County Architect)

To accommodate 68 mentally-handicapped children; conceived as a standard design for use on other sites in future. This (the first) is now under construction.

There are four classrooms, the fourth one being combined with the dining room-assembly hall. By using a folding partition, classroom No. 3 can be added to these rooms to form one large assembly hall, 55 ft. by 21 ft. The kitchen deals mainly with cooked meals which are brought to the centre each day in heated containers.

The building is constructed of brick-bearing walls with 'lattice' roof beams, compressed straw boards and three layers of roofing felt.

Deputy County Architect: D. Senior. Assistant County Architect: K.D. Box. Principal assistant architect: J. F. Ward. Assistant in charge: W. S. Coates.

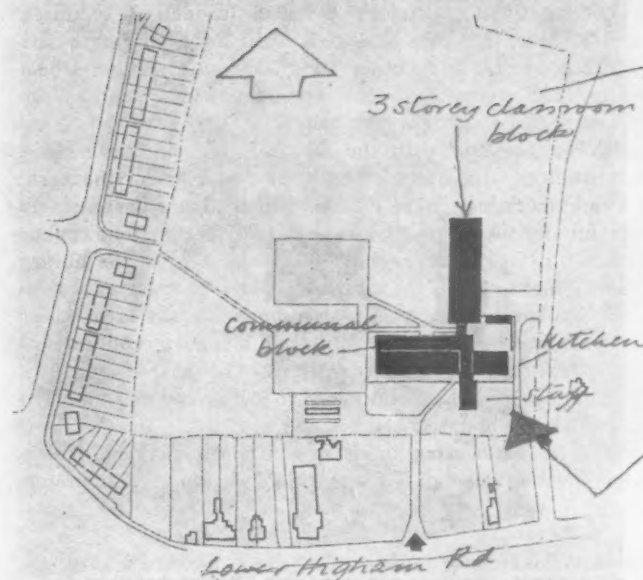


#### GIRLS' SECONDARY SCHOOL: GRAVESEND

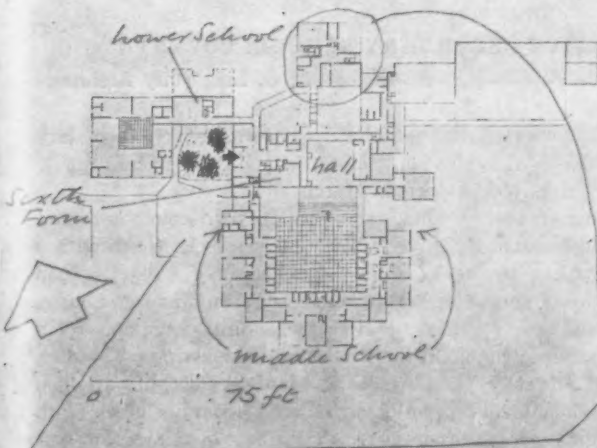
Elie Mayorcas (with E. T. Ashley Smith Kent County Architect)

A 4-form entry (five-year course) secondary school for 660 pupils. The site is mainly open with a fall to the north and interesting views of the river. Work will begin in May.

Two main rectangular blocks, at right angles, are linked by the pupils' entrance. The teaching block faces east and west, and the communal block north and south. The latter contains an assembly hall, gymnasium, small hall, kitchen, canteen and changing-rooms, etc. These serve both gymnasium and assembly hall, with easy access to the stage for dramatic performances. The small hall can also be used for dining, allowing a reduction in area of the dining-room



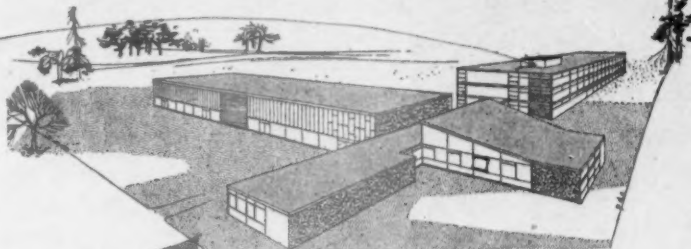
0 300ft **SITE PLAN**  
Girls' Secondary School,  
Gravesend.



**GROUND FLOOR**

which also forms part of the general circulation and provides an extension to both the halls by the use of sliding-folding screens.

The structure is a light steel frame, with exposed concrete perimeter beams at floor levels, faced with self-coloured asbestos sheets.



Metal windows have glass panels below the eills, backed by light-weight concrete. External cladding is either brick panels, glazed tiling, or cedar boarding.

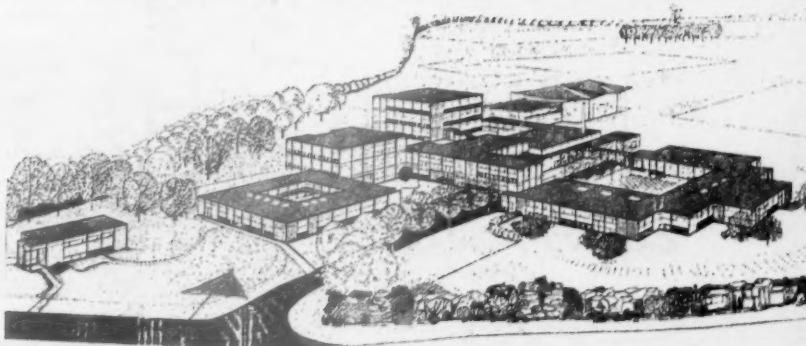
Assistant architects: L. E. Tatum, A. M. Graham, M. Hichisson, P. Robson, J. P. G. Moore, D. A. Hatcher and A. Gough. Quantity surveyors: Thurgood, Son and Chidgey. Services engineers: W. E. Fretwell and Partners.

#### **GRAMMAR SCHOOL: ARNOLD, NOTTS**

Ministry of Education (with D. E. E. Gibson, Notts County Architect)

A 4-form entry mixed grammar school, with a sixth form of 120, accommodating 720 pupils altogether. It shares a 34-acre site with a girls' secondary modern school. Construction begins in March.

Educationally the school has some experimental features. It is divided into three parts: Lower School (first and second years),



Middle School (third, fourth and fifth years) and Sixth Form (sixth, seventh and eighth years). The Lower School provides a general course, and there are eight forms of 30 pupils each. At the beginning of the third year each pupil, according to ability and aptitude, enters one of six courses, and the Middle School is organized into six separate houses, each for 60 boys and girls. Each house has a house-room in which the pupils also dine, a group-room for 20 pupils and studies for housemaster and mistress. Cloakroom and kitchen are shared between two houses. The three kitchens are supplied by trolley from a central store. The Sixth form has its own common-room, tutorial rooms and studies planned round the library. In a central block are library, reading-room, assembly-hall, music rooms and administration. A separate science block contains a general laboratory for Lower School classes, five specialist laboratories for the Middle School and Sixth Form and a lecture room.

The building has a structural frame of precast and pre- and post-tensioned concrete (evolved in collaboration with the research and development department of John Laing & Son and the consulting engineer, A. J. Harris). The structural grid is 40 in. Cladding is of timber faced panels.



### 13. SCHOOLS

#### SPECIAL SCHOOL: ROEHAMPTON

James Cubitt and Partners

For the London County Council: a school for delicate children (providing 180 places for boys and girls aged 5-16), sharing a site between Luttrell Avenue and Putney Park Lane with another school for physically handicapped children to be built at a later date. Work on the Delicate School will begin next month.

A single-storey building with the assembly hall in the middle. The main entrance, with access for school buses, is on the east: nearby is a caretaker's house. The kitchen, which adjoins the assembly hall, will eventually supply meals also to the Physically Handicapped School, to which it will be connected by a covered way. The library is also next to the assembly hall so that it can be used as a rest-room for the whole school as well as a secondary study area. Class-rooms have their own lavatories and a bed and blanket store. Practical rooms (woodwork and housecraft) will also be shared with the Physically Handicapped School and joined to it by a covered way. The boiler-house will serve both schools.

Construction is load-bearing brick with projecting timber fascia and aluminium fascia over glazed areas. Roof decking is aluminium.

#### ROMAN CATHOLIC PRIMARY SCHOOL: WITNEY, OXON

Booth, Ledebor and Pinckheard

For the archdiocese of Birmingham, on an open site bordering the suburban fringe of the town. Construction will begin very shortly. Later on a convent will be built on an adjacent site for the nuns who will staff the school. To be built in two stages: first three classrooms, assembly hall, kitchen, staff rooms, etc.; secondly two more classrooms. Each classroom group is designed as a separate unit, domestic in scale, with its own front door, cloakroom space and lavatories. Each has outdoor teaching and garden areas.

Construction consists of load-bearing cavity brick external walls, concrete block internal partitions, concrete floors and timber roofs.

#### COMPREHENSIVE SECONDARY SCHOOL: COVENTRY

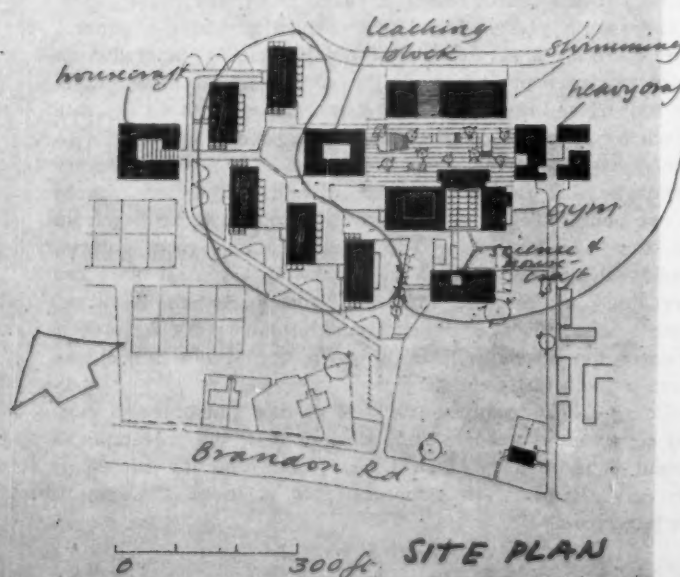
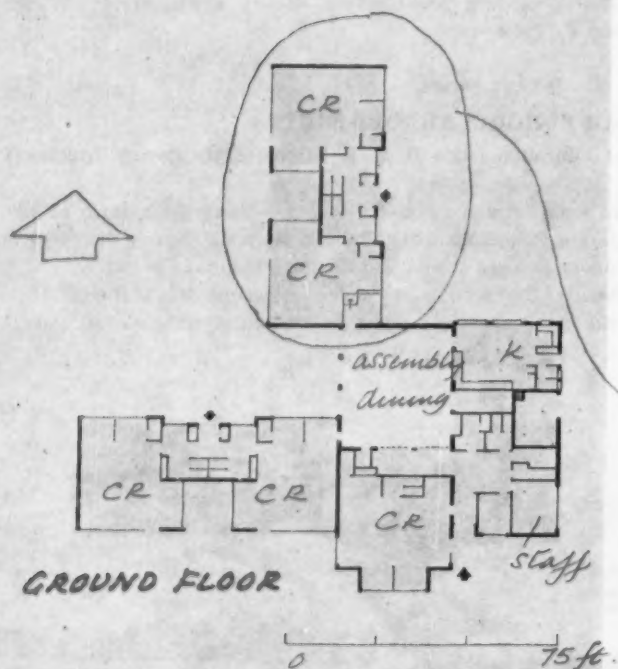
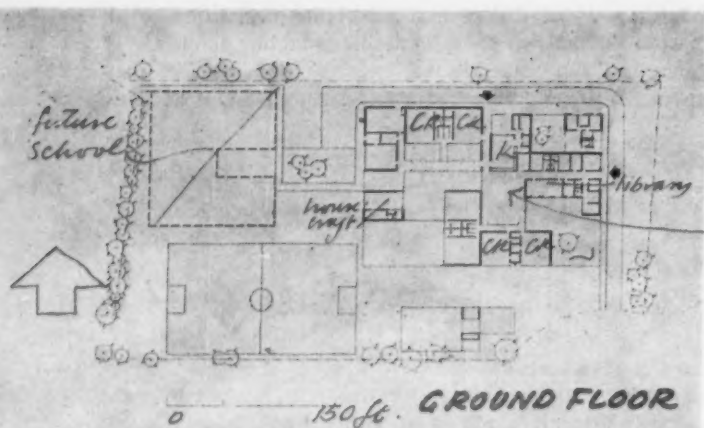
A. G. Ling (City Architect)

First (3-form entry) instalment of a 10-form entry secondary school for 510 pupils at Binley, east of the city. It had to be capable of separate operation. Works starts in March.

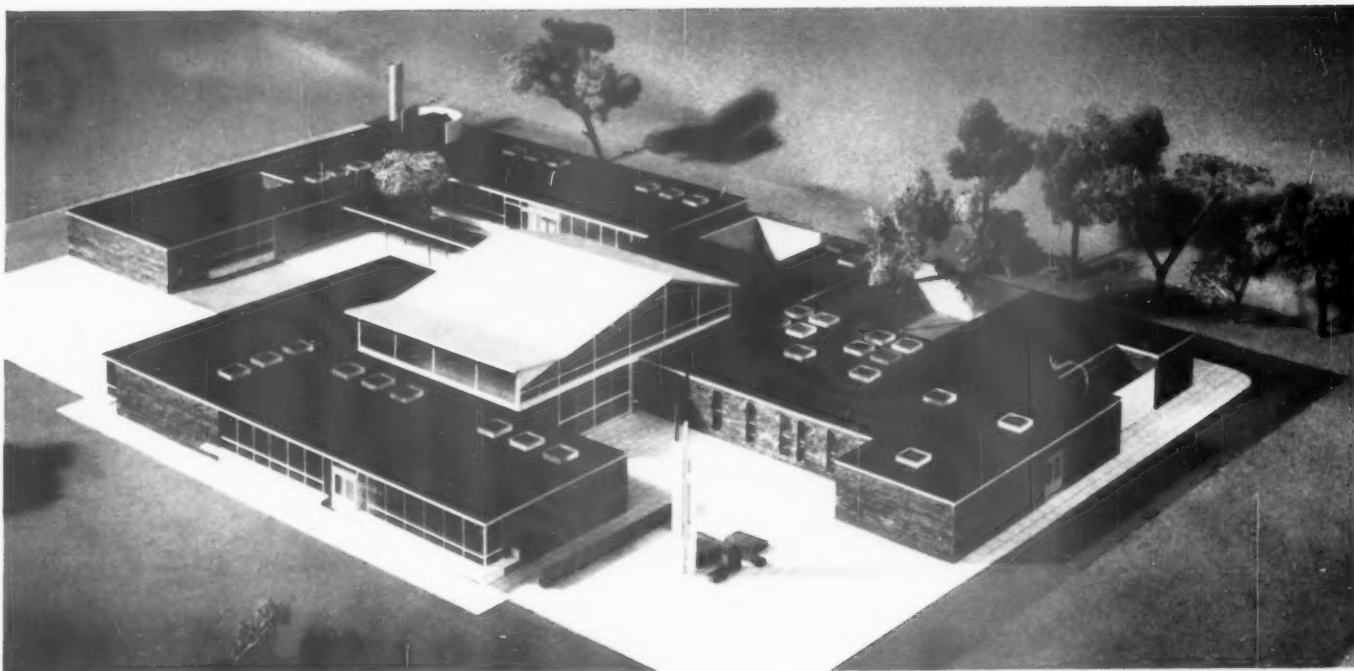
Planned on the 'house' system, each with its own common-rooms, dining-room and headmaster. Five 2-storey house-blocks (each with a garden in front that can be used for teaching) have a service road behind giving direct access to the kitchens. Each contains two houses, one for boys and one for girls, each with a dining-common room served by the same kitchen. On the first floor are classrooms, studies, staff rooms, etc. The main teaching block, 4 storeys high, has an open court at second-floor level and adjoins the main assembly block, with hall, gymnasium, changing-rooms, etc. The first instalment of the scheme consists of two of the house-blocks (four houses), a 2-storey science-housecraft block, a single-storey heavy craft block and one hall for assembly and gymnasium, together with changing-rooms.

The structure (designed to combat mining subsidence) consists of a pin-jointed steel frame on a thin slab foundation, with external walls of concrete slabs, hanging tiles and boarding. Roofs and floors are of timber joists spanning between steel beams. Windows are timber.

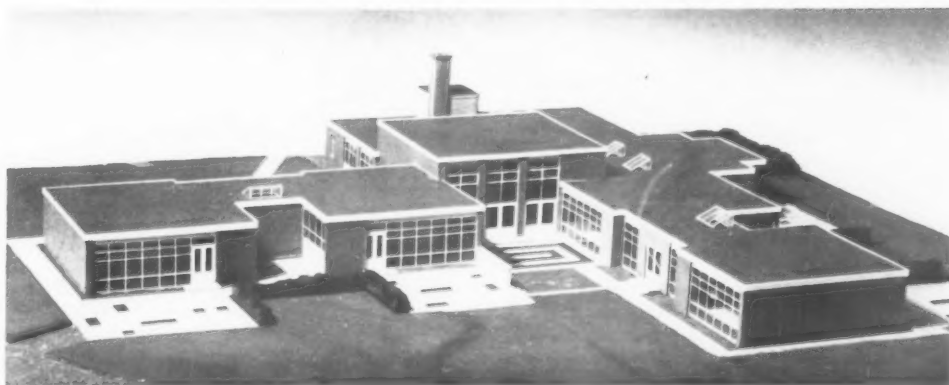
Principal schools architect: W. Kratchmer. Architect in charge: J. W. Davidson.







*Above, school for delicate children at Rochampton, by James Cubitt and Partners. The accommodation is planned in a number of wings grouped round a central assembly-hall.*



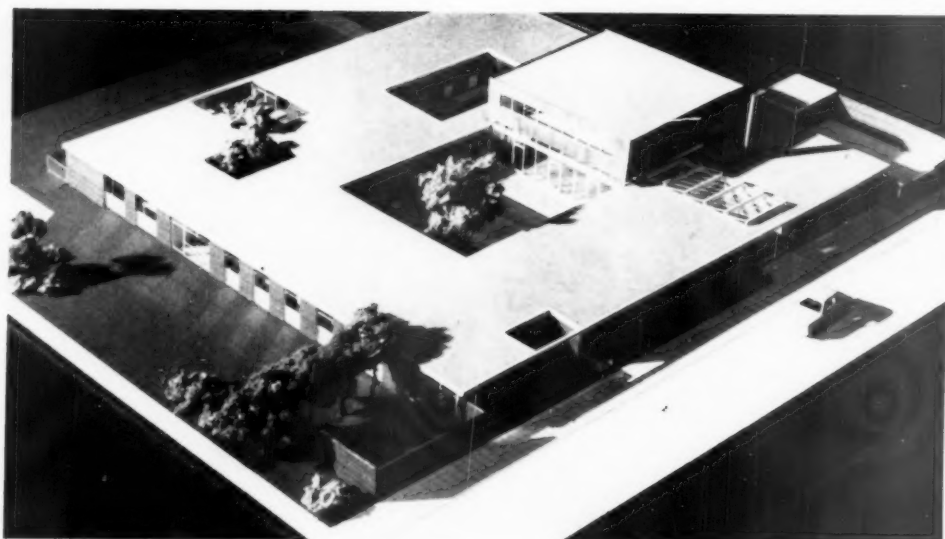
*Left, Roman Catholic primary school at Wilney, Oran, by Booth, Ledebor and Pinckheard.*



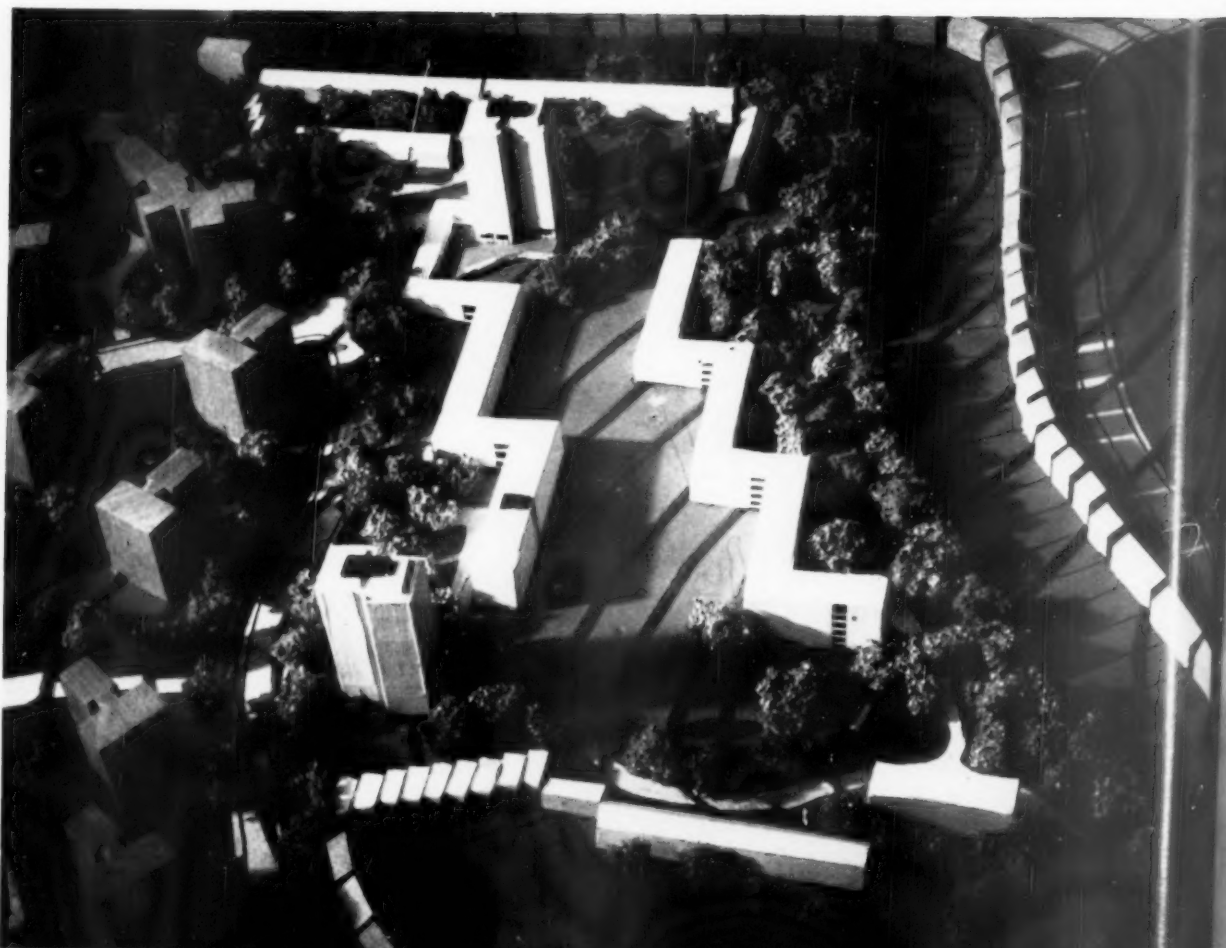
*Left, comprehensive school at Binley, Coventry, by the City Architect. The identical buildings on the left are the house-blocks. They form a circle round the four-storey teaching block.*

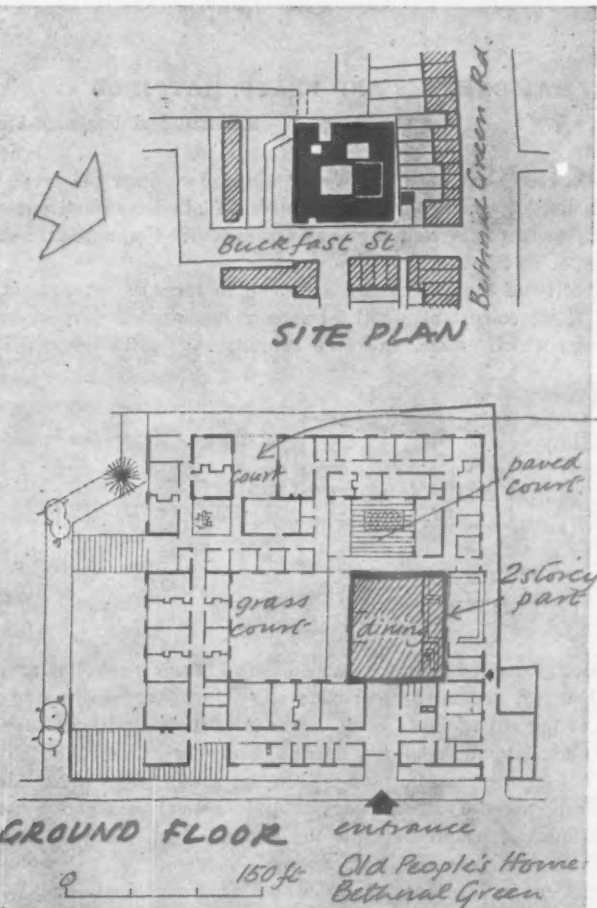
# 14 HOUSING

*Old people's home on the L.C.C.'s Hereford Street housing estate, Bethnal Green, showing the planning round three internal courts.*



*Housing at West Hill, Wandsworth, by Clifford Culpin, on a site adjoining the L.C.C.'s Ackroydon estate. There are flats in two point-blocks, maisonettes and terrace housing along the north and south boundaries.*





## OLD PEOPLE'S HOME: BETHNAL GREEN

Hubert Bennett (London County Council Architect)

Part of the LCC Hereford Street housing estate. The adjacent site to the south is occupied by a 2-storey terrace of old people's flats. It is hoped to start work next July and finish by September, 1959.

Accommodation is provided for 53 old people in single, 2-bed and 4-bed rooms. Self-contained quarters for the matron, assistant matron and two assistants are on the first floor. The building is mainly single-storey to avoid stairs and lifts and the need for pile foundations (the site is covered by 10 ft. of made-up ground). The entrance hall is large enough to provide some sitting space and leads directly into the dining-room. From here, a large grassed court is seen beyond a terrace facing south and the paved court and pool—slightly obscured by screens—to the west. A small, luxuriantly planted court lies in the south-west corner of the building, and the bedrooms and sitting-rooms of the old people are dispersed round these three courts. Service rooms, the kitchen and the boiler-room are on the north side with access to the service yard.

The 3 ft. deep strip foundations of the single storey part of the home carry load-bearing external and spine walls. Internal partitions are of clinker block. The 2-storey block has a steel frame. Infill panels under windows have an external facing of roughcast glass. Other cladding materials are facing bricks on the ground floor and vertical cedar boarding on the first.

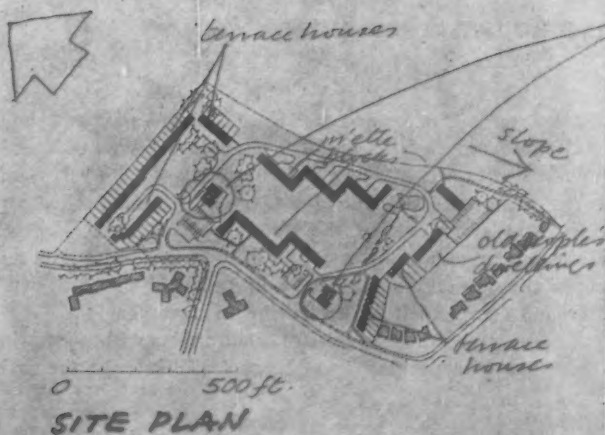
## FLATS AND HOUSES: WANDSWORTH

① Clifford Culpin

At West Hill, for the borough council. The site, known as Edgecombe Hall, forms the eastern boundary of a large area of new development, including the LCC's Ackroydon Estate. The 12½ acres are beautifully landscaped with fine trees. There is a long grass slope, with a fall to the south and ornamental ponds at the lower end. At the highest point is the existing Victorian house which will make way for one of the two 14-storey blocks. The scheme has not yet received formal approval, but it is hoped to begin construction in March.

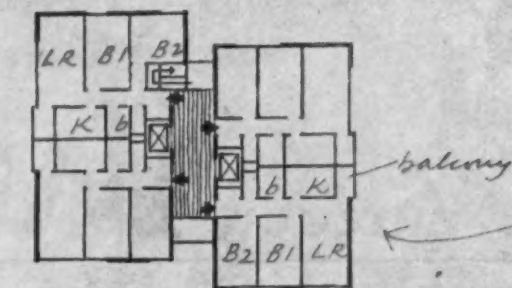
A density of 100 persons per acre provides 315 dwellings, consisting of flats, maisonettes and terrace houses. At the northern end a nursery school will be built later. The centre section of the scheme takes advantage of the sloping ground. Two long staggered terrace blocks are arranged in such a way that a person entering the block at its highest end can walk through on the level to find himself four floors up at the extreme southern end. This almost eliminates the need for staircases and there is only one lift, at the southern end of the eastern block. Living-rooms overlook the grassed, sloping area in the centre of the site. The 14-storey point blocks have four 2-bedroom flats on each floor and four 1-bedroom flats at the top.

The staggered terrace blocks are of load-bearing brick construction.





## 14. HOUSING



0 25ft  
**TYPICAL FLOOR**  
**Point Block**  
Flats & Houses  
Wandsworth



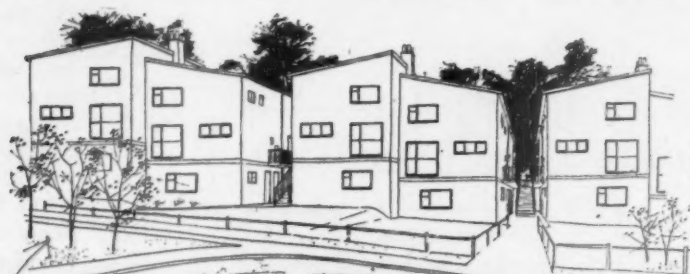
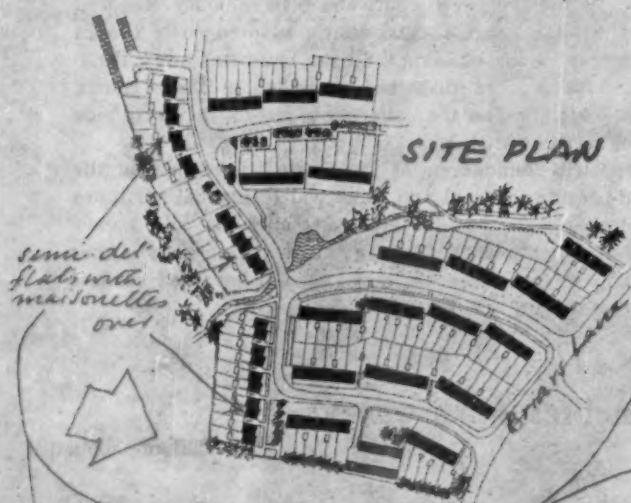
The point-blocks have a precast concrete frame with brick panel infilling. The terrace housing is of brick cross-wall construction with timber and asbestos front and back panels.

### HOUSES, MAISONNETTES AND FLATS: HATFIELD

Stillman and Eastwick-Field

In the Oxlease area of the new town, 146 dwellings (42 large 3-bedroom houses, 56 small 3-bedroom houses, 24 3-bedroom maisonnettes and 24 single-room flats) and 42 garages are provided on a 10-acre site. Work is expected to begin this summer.

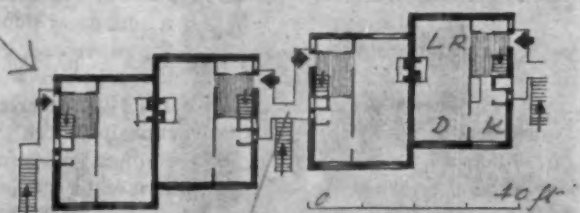
The majority of the houses are arranged in terraces set along the contours. These consist of small 3-bedroom houses, and large 3-bedroom houses which extend over the tunnels at first-floor level. The



ground-floor plans of both types are identical. Each house has a back door with direct access to a separate store, fuel store and space for dustbins at the rear. Where back access is available without tunnels there are some terraces of five large 3-bedroom houses. The stores in these houses are incorporated within the ground-floor area. Along the southern boundary is a series of linked semi-detached 3-storey blocks with single-room flats on the ground floor and 3-bedroom maisonnettes above, reached by an external staircase.

Construction is load-bearing brick (using both black and white facing bricks), with timber roofs covered with a new concrete slate which can be laid to a low pitch.

Assistant architect: David Brain. Quantity surveyors: Davis, Belfield and Everest.



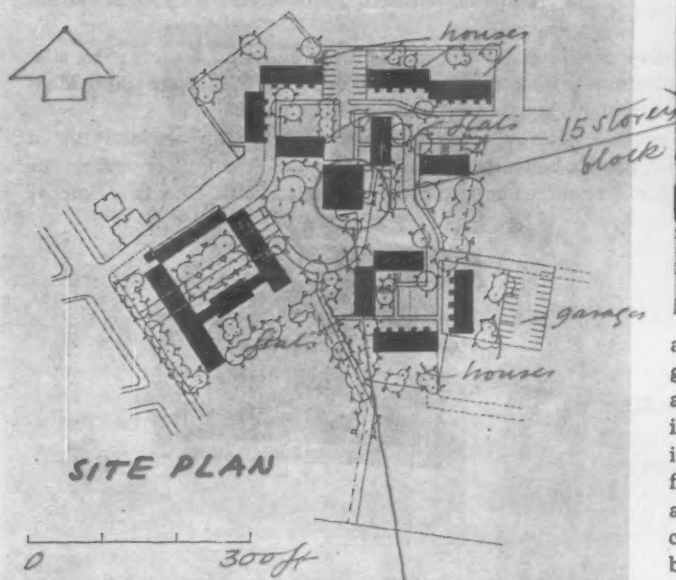
0 40ft  
**FLOOR 1**  
3 storey maisonnette  
blocks Hatfield

### FLATS AND HOUSES: CAMBRIDGE

Eric Lyons

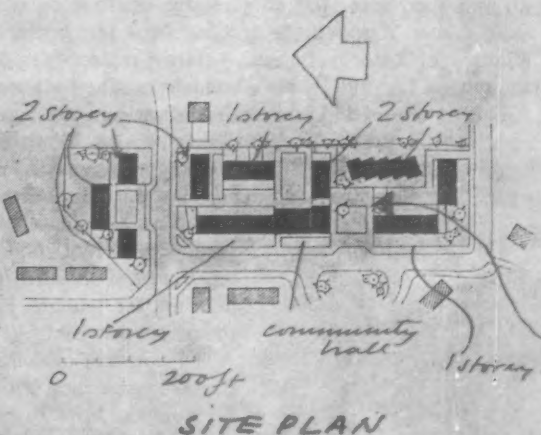
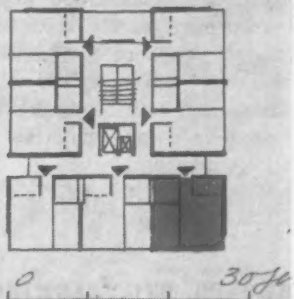
In Hills Road, on a site owned by Jesus College. The approach lies through Nos. 45 and 47, Hills Road, two obsolete Victorian houses, one of which still retained a well planted garden of  $3\frac{1}{2}$  acres. Some of its features, including as many of the trees as possible, are preserved. A 15-storey tower block (the tallest private-enterprise residential building in England), 2-storey and 3-storey blocks of flats and terrace houses, provide altogether 161 dwellings. It is hoped to begin work shortly and complete it by the spring of next year.

The layout takes the form of a series of quadrangles with pedestrian approach only, but with parking and garage facilities near the main



**TYPICAL FLOOR**

*Point Block  
Cambridge*



access road. The first quadrangle (of 3-storey flats) has an open ground floor in places, leading through to the other blocks. Beyond approach only, but with parking and garage facilities near the main it, at the top of a ramp, is the 15-storey tower, 135 ft. high, containing large single-room flats, with maisonettes on the fifth and ninth floors. The roof is laid out as a viewing platform and may also have a restaurant. South and east of the tower, arranged in squares and culs-de-sac, are 2-storey blocks of flats and houses, which can also be approached from Tenyson Road or by footpath from Station Road.

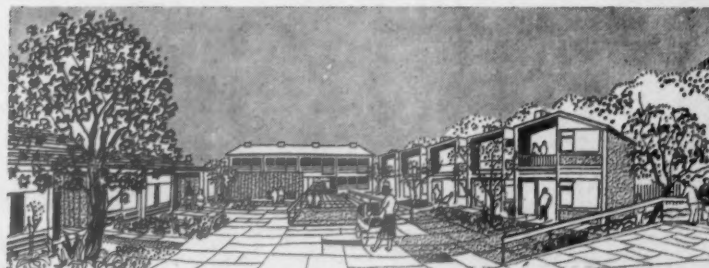
The tower has a reinforced concrete frame faced with stone or a stone-aggregate rendering and largely filled in with glazed screens. The smaller block are of brick cross-wall construction with a reinforced concrete first floor, timber roof and variously clad infillings including tile-hanging.

#### **OLD PEOPLE'S HOUSING: CRAWLEY**

③ J. M. Austin-Smith and Partners

On a site of about two acres sloping down over 400 ft. from south to north. 58 dwellings are provided, consisting of bedroom, living-room, kitchen and bathroom, in 1- and 2-storey blocks. A community room will be built later. Construction will begin this spring.

To create a self-contained atmosphere and to exploit the existing slope, the dwellings have been grouped to form a series of inter-related open courts at contrasting levels. The original path across the site has been kept to allow access through the site (and interest for

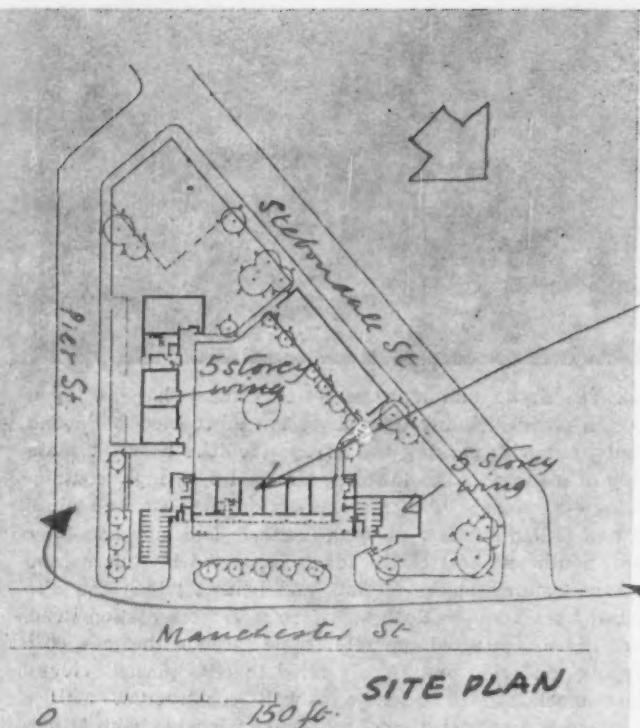


the old people) to the surrounding population. The flats in the 2-storey blocks have a bed recess off the living-room, this additional area being encouraged by the Ministry of Housing's method of subsidy.

The structure consists of cross-walls with 11 in. cavity 4½ in. load-bearing walls. Staircases and upper floors are in precast concrete. The low-pitched roofs are covered with aluminium. Cladding on front and rear elevations is Douglas Fir weatherboarding. It is hoped that an all-electric floor-heating system may be possible if running costs can be kept commensurate with the present pensions.

Partner in charge: Geoffrey Salmon. Quantity surveyors: Young and Brown.





## FLATS AND MAISONNETTES: ISLE OF DOGS, LONDON

Louis de Soissons, Peacock, Hodges and Robertson

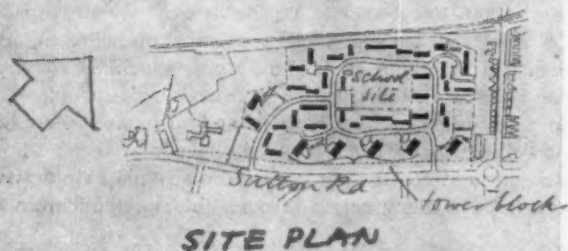
Fifty-five dwellings for the Isle of Dogs Building Society. The site, of approximately  $1\frac{1}{2}$  acres, is at the corner of Pier Street and Manchester Street. No starting date has yet been fixed.

The central 9-storey block, planned with a staircase and lift at each end, has six bed-sitting room flats on the ground floor and on the upper floors twenty-four two-bedroom maisonnettes. The two 5-storey



wings contain sixteen one-bedroom flats, five 3-bedroom flats and four 4-bedroom flats. Gas-heated drying cabinets are provided in drying-rooms opening off the staircases: one to every seven flats. At ground-floor level there are twenty-seven pram sheds accessible both from the street and under cover from the staircase halls.

The construction of both blocks is a reinforced concrete frame with concrete cross-walls. Facing materials are buff-coloured facing bricks and mineralite rendering.



## FLATS, HOUSES, ETC.: BIRMINGHAM

A. G. Sheppard Fidler (City Architect)

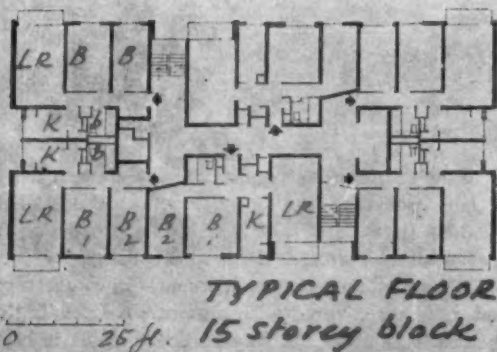
On the Lyndhurst estate, Erdington. The site, of some  $37\frac{1}{2}$  acres, contained 19 Victorian houses together with some back land between their gardens and the railway. The widening of the road and the provision of sites for a primary school, old people's home, shopping centre, club, pub and open space left 25 acres for housing, on which 740 dwellings are planned. Work on the first blocks is just beginning.

There is a mixture of 2-storey houses, 4-storey maisonnettes, and multi-storey flats, with a few old people's bungalows. The flats are in tower blocks, including one of 15 storeys, the tallest in Birmingham. It stands on a plateau on the southern end of the site. The others, of 11 storeys, are spaced along the Sutton Road frontage. All tower blocks are identical in plan, with six dwellings per floor. Two 2-

bedroom penthouse flats occupy the roof of each block with a screened drying area for tenants. Bathrooms are internal.

The flats are of concrete frame construction with infill panels of brick to external flank walls and no-fines concrete to gable walls.

Deputy City Architect: J. R. Sheridan-Shedden. Principal architect (Housing): H. E. Buteux. Group architect: H. H. E. Lea.





## COUNTER-ATTACK

### 1 OLD POOLE

The old town of Poole is virtually an island some 200 acres in extent. Its land connections to the NE are restricted to two level crossings and a bridge links it to the mainland to the SW. As a port, in the days before modern deep draught vessels, it enjoyed a monopoly of trade to Newfoundland and the Channel Islands and it is this prosperity which has been responsible for the numerous sturdy and gracious eighteenth-century houses and public buildings which form the backbone of the structure of the town.

With the decline of ocean-going shipping in the nineteenth century and the expansion of the South Coast as a residential area, Poole developed a new and industrial character. At this time much of the eighteenth-century residential pattern of terraces with large gardens was destroyed by the building of workers' houses in their gardens, thus creating slum conditions.

Today new industries are developing, and we can see a pattern in which the island, isolated to some extent by the railway from the main bulk of the population, is encircled by industry at the salt water perimeter, its diameter being the High Street, the shopping street. On either side of this are residential pockets, now abandoned by many of the old families for the less compromised avenues and drives of Parkstone and Branksome.

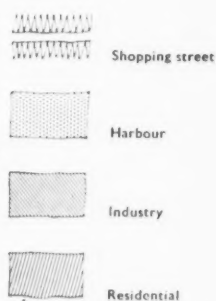
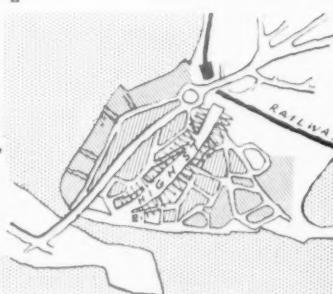
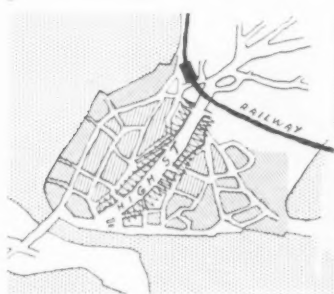
The undoubted tendency is for Old Poole to change its character and use. On the one hand an increasing industrialization of the area at the expense of houses is threatened, and secondly the construction of new shopping areas outside the old town and on the heavily populated side of the level crossings is putting the shopping centre in jeopardy.

At this point in the town's history the County Planning Officer of Dorset stepped in with a development plan for Poole Old Town. And a very good plan it is too. May it bear comment?

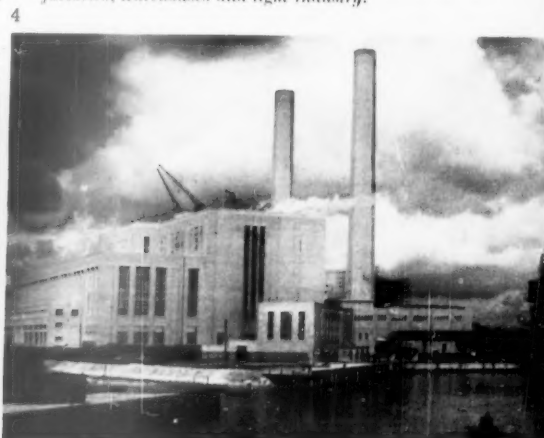
Briefly the plan aims to halt the decay and slow death of the old town and to pump back life into the town centre. The comment we make here is based not on this principle but on the technique of achieving the ends. The question is: will it achieve them?

The official plan proposes to get vehicular access to Old Poole by the construction of a new bridge over the railway and from thence a new road to link with the old bridge to the mainland at the south-west.

1, the town centre today showing the railway cutting off the town from the main centre of population inland. 2, diagrammatic sketch of the County Planning officer's proposals.



**INDUSTRY.** At one end of Poole is a gas works, 3, and dominating the other is the power station, 4.



In between these two lies a varied assortment of factories, warehouses and light industry.

**THE QUAY.** Lined with mills, warehouses and public buildings, 5-7, the quay at Poole has a simple, unpretentious and businesslike quality enlivened by eighteenth-century gems such as the Customs House.



**SHOPPING.** 8, a shopping street in the old town showing its character of concentration and business.



9, a new shopping 'centre' and bus station combined just outside the old town.



**HOUSING.** 10-12, typical views of eighteenth- and early nineteenth-century houses and streets in Old Poole.



**GARDENS.** The few existing old walled gardens, 13 and 14, should be the model for the new development.

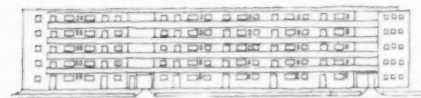


**THE NEW POOLE.** 15, an imaginary drawing showing the sort of character which could be achieved by a concentration of activities: the busy shopping

street beyond which lies a rehabilitated (not refrigerated) residential area and beyond that, across the water, industry.



This new road is to carry short-distance through traffic and will not be a service or development road. It will feed the High Street and the island. The High Street is to become a shopping precinct and through traffic will be eliminated by permanently blocking the existing level crossing. Rehousing of workers is encouraged for those with jobs locally and a wholesale



Elevation of proposed new flats.

clearance of back gardens will open up the many listed buildings and houses to form a garden precinct.

The basic idea of regenerating Old Poole is admirable, but the plan as proposed—particularly the antiquarian precinct and the proposed reduction of population on the island—might in fact have the opposite effect. Old Poole would become a museum piece instead of a living entity. This however could be prevented by a very slight shift of emphasis.

A certain amount of industry—roughly what is there already—has to be around Poole Quay. It can approximately be served, as it is now, by people living on the island. Any reduction in population and increase in industry will create a pattern like London in miniature of long journeys to work and congested roads.

The people on the island enjoy living there: enjoy the sense of belonging to somewhere with character, and the nearness of the shops, work and quayside. If the slum property was improved or replaced they would enjoy it much more. If the slums were cleared and the back gardens recreated (some of them still remain, e.g. the Rectory garden) the proposed precinct would be part of a live town, not something carefully preserved but sterile. The houses which would have to come down could easily be replaced by terrace family houses instead of flats. Extra industry, unless it had to be near the quay, could do as the Loewy factory has done, and be dispersed throughout the rest of the borough close to its work-people. By this means new centres could be created which could in time and with care be just as individual as Old Poole is now.

At the same time what draws the tourists to Poole is firstly the Quayside and secondly the unique character of the shops they pass on the way there. To close the High Street to motor traffic might well stop the tourist trade; surely once one through bridge has been built there is no need to close both level crossings. Similarly, the need for shops is not north of the railway but south of it.

Gordon Cullen

## 2 ROAD IMPROVEMENTS

Gordon Cullen's article in the December REVIEW applied to street lighting what might be called the only rule of the Counter-Attack Bureau: that places alter circumstances, and that what may be admirable in one place may be impossible in another.

Here are a set of cases about road improvements, a subject similarly bedevilled by rule-of-thumb solutions. In this case the automatic reaction is to widen and simplify, without noticing first that a number of alternative solutions are possible and second that traffic flow is not always the greatest need, even in road engineer's terms; for example declining towns may need more traffic moving more slowly, provided that they don't thereby become national bottlenecks. National and local traffic needs and solutions are entirely different things. Obviously, Rochester and Staines Bridge and Warrington must be by-passed; but equally there is no need to rebuild Louth or Norwich so that local traffic can get home five minutes earlier. A relief road is essential through Christchurch Meadows, Oxford, but would be fatal through Westgate Fields, Chichester—and so on. The following cases exemplify the technique. Once you love your town—as did the Viennese street lighting engineer in the December AR (page 293)—the result is easy; but as there's little love lost in local government these days, in any sense, the technique will have to do in lieu.

First, the case where in principle the Ministry of Transport is right and the preservationists wrong—at Ludlow, Salop, where the outcry is against a proposed new bridge, 1 (site arrowed on photograph), to duplicate the mediaeval Ludford Bridge\* 200 yards downstream of it, combined with widening at the top of the market place where ten feet off the Tolsey (a moderate c15 timber-framed building) is needed to overcome an undoubted bottleneck caused by a crossroads at the top of a 1 in 7 slope both ways, 2. Traffic north to south on A19 is moderate and steady—South Wales to Lancashire—there is no effective one-way route and a by-pass, unlikely anyway, would most likely run west of the town and remove the unique relationship with the hills beyond. If the crossroads were sealed off by blocking both side roads, the change could benefit both town and traffic. The centre would be permanently saved from explosion—and as it is a local market there is no fear that trade will go elsewhere, which is just the opposite case to that of Old Poole,

\*If a replacement isn't forthcoming soon it will decide the issue on its own account through being knocked into the Teme by a passing lorry.



**Ludlow:** 1, the Teme downstream of Ludford Bridge. The view is taken from the parapet of the bridge and the arrow shows the approximate site of the proposed new bridge. 2, the central crossroads looking up one of the 1-in-7 slopes; Tolsey on the left. 3, King Street with its inadequate pavements; if it were closed to through traffic pedestrians could use it in comfort.

while pedestrians could use King Street, 3, in safety.

Yet the County Surveyor and the MOT are taking several ellis where they only need a few feet, for they now propose to demolish the whole of the Tolsey, 'tracing the outline after demolition on the road in some contrasting material.' Half of a half-timber house with a glass wall across the end to show the structure could be something to see; the 'outline traced in some contrasting material' is a pathetic gesture to misunderstood amenity that will deserve the sneers it is likely to receive in Ludlow.

At Ludlow all of the town that matters is to one side of the through road; at Louth, Lincs, it isn't; a different problem, hence a different solution, and one not to be found by looking up a reference in a book of standards. The traffic problem is similar to Ludlow's in a smaller degree: steady through traffic along A16 in and out of Grimsby, which probably will be relieved by the new flyover over Lincoln's notorious level crossings which will re-route the traffic clear of Louth. There is also very sporadic heavy east-to-west



**Louth:** 4, the east end of the church seen from the town centre. The proposed dual carriageway would run across the foreground.



traffic to Skegness. The Ministry of Transport proposal includes, though it is difficult to credit, a 74-ft. carriageway which would cut off the church, 4, and the best street of Louth—Westgate—from the rest of the town. Clearly, that is inadmissible. Clearly also, if two big lorries meet in today's Upgate, 5, they block it. The solution is one-way working in the centre, with south-to-north traffic going through Upgate and north-to-south traffic running by the station, where an alternative road is all but ready, 6. The one-way sections can be very short, to ease local traffic problems, with a psychological diversion on to the alternative at the north end, by arranging differing angles of join. The holiday traffic can be dealt with by partial diversion and special one-day arrangements as used in south-east England last summer. This threat is in its early stages and fortunately the residents are determined to oppose it.

In these two cases the Class I and II road system—and hence the Ministry of Transport—is involved. In fact the worst results often occur when local officials apply the national standards out of hand to small-scale problems; just as the worst street lighting results are produced by borough engineers mesmerized by the recommended lighting heights. At **Stoke Ferry, Norfolk**, A134 carries little traffic, like the other South Norfolk roads, and south-east of the village there is a ten-mile fast stretch to Brandon. The centre of Stoke Ferry is simply a T-shaped road junction, 7, and the building on the corner (arrowed) is due to come down. In fact this bottleneck is the only thing which prevents traffic roaring through the village, having been given its head in the open country around. What it needs is to be reinforced, not removed, otherwise road safety will be reduced, not increased: the maps 8 and 9, show what is needed, incidentally illustrating the point that the local layout rather than the MOT grading should sometimes dictate which road should have priority. In fact there is almost as much traffic turning down Wretton road to the sugar beet factory at Wisseton as runs straight through on the main road. With this solution there might also be some hope of making a town centre out of Stoke Ferry's bedraggled small market place.

Finally, the motor car is not an evil in itself. This might seem not worth saying were it not for the implications of the proposals for **Poole, Dorset**, described in more detail by Gordon Cullen on page 77. Visitors go to see the Quay via the High Street and they go by car. To make the High Street into a pedestrian precinct will simply sterilize it and make it impossible to regenerate except as a mixture of industrial zone and museum. It wants



#### Louth cont.:

5, Upgate today: obviously too narrow for a double line of heavy traffic. 6, part of the new road north of the station which only needs joining up with A16 (about 1/2 mile) to provide an inner relief road.



#### Stoke Ferry: 7, the

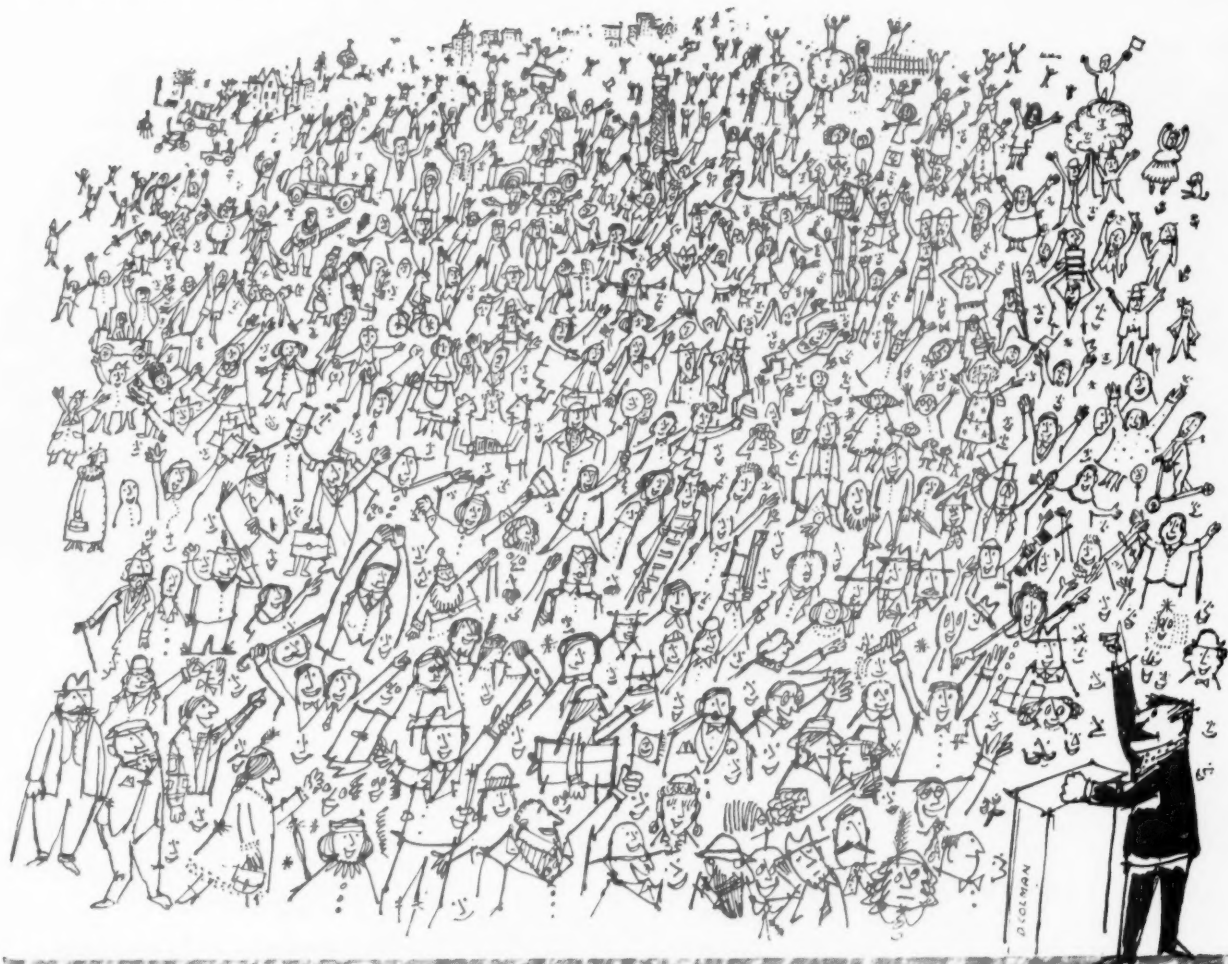
centre of the small town. The arrowed building is to be demolished. 8, plan of the town centre as it is. 9, the town centre as it could be if road safety were increased by slowing up the traffic, not accelerating it: the central island acts not as a roundabout but as a tiny town square.

all the cars it can get, and as few restrictions on them as possible; car parking where you like as long as you like.

Cars are there to be used, and not only by their owners as means of transport, but by the town planners as a psychological aid in town making. If there's a traffic block you start noticing the shops, which is what the town-maker wants; if you go into a precinct you get such a fright in the way of road surfaces and widths that you aren't likely to go back on wheels, and so on. It is up to you; not compulsion but a rational choice, a quality which we used to be proud to call British. If there is no choice—Queensferry, the Aust ferry, Notting Hill Gate—then clearly wholesale replacement and improvement is the only solution. But very few cases are as bad as this, and until they get to this state the possibilities are endless.

Ian Nairn





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### 3 BUREAU BULLETIN



**39. Honiton, Devon (Area Planning Office).** Planning control so often fails that it is a pleasure to report such a resounding success as this. Woolworth's took over Honiton's Grecian Corn Exchange, and the planning authority made a condition that the front wasn't to be altered. The result is completely successful from the town's point of view, 1, and just as much of an advertisement for Woolworth's as their more familiar treatment. When the system works or is made to work by efforts of local officers—it can work very well indeed.

**40. Hampstead, London (Borough Council).** Hampstead is about to consider the design of a Civic Centre on a large block to the east of Swiss

Cottage, a project which could be the most important British public building since the Festival Hall. It is feared that the architect may be decided in committee and that the architecture may be Neo Georgian. Surely this is a case for either an open competition—which might well attract an international entry—or a short list of widely differing designs on which the whole borough could vote (there is no question in Hampstead of public apathy about architecture).

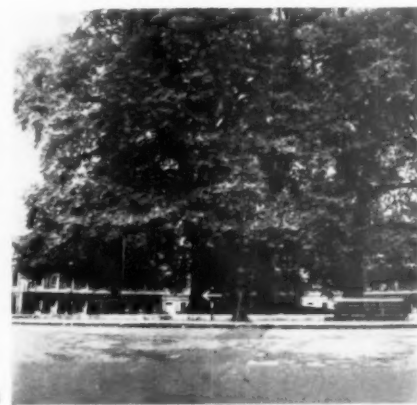
If the design is to 'keep in keeping' with the surroundings there is no possible alternative to a modern design, because all of the buildings around the site have been designed in the most modern style of their time, whatever their intrinsic merit. The series starts with the Swiss Cottage itself; to the west of the site are the thirties—modern—Odeon, and flats by Robert Atkinson, to the south-west are flats by Louis de Soissons and schools by Edward Mills (AR, January, 1954) and to the south are two special schools by the LCC (AR, January, 1957) which are models of sensitive and up-to-date design.



**41. SOS: Heath near Wakefield, Yorks** W.R. Heath, a mile east of Wakefield, is a splendid village fallen on evil days with industrial sprawl. But three fine houses remain—two are Georgian, one by James Paine, 2, and one by Carr of York; the third is a strange Elizabethan house in the same style as Barlborough and Hardwick Hall. If no private owner can be found to keep them up, could a local industrialist or the CEA or NCB take them on as office space or prestige headquarters? At the moment Heath is a desperate oasis in a bleak industrial area: it could be one of the showplaces of the West Riding.

**42. The Circus, Bath (Bath City Council and Ministry of Transport).** A well-known view, 3, with something missing—a Keep Left sign. In this case it is because all approach roads are

[continued on page 84



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continued from page 82]

equipped with "Turn Left—One Way Only" signs before reaching the Circus; as the approach roads are architecturally less important than the Circus itself, this is a considerable improvement and reflects a lot of credit on the Bath City Engineer for finding a tiny chink of flexibility in our absurdly cumbersome traffic sign legislation. The photograph shows perfectly that an arrow, being a visual instruction, can fit even into an architectural set piece, whilst "keep left," being a literary one, gives the viewer no choice; he is back in the world of the form and the memorandum. If the Ministry lawyers are so worried about visual signs, why not bring a test case to see if non-verbal signs are valid?

**43. Hampstead, London (LCC).** Tree felling on the boundary of the newly built Kynaston School was reported to the Bureau; it investigated and found that although this was true everything had been done to make the best of the situation. Peter Shephard, landscape architect for the school, said that they knew from the start of the scheme that these trees were to be felled for road widening, but he had not expected it to happen so soon. He had tried to persuade the LCC to save them, but without success. He did, however, succeed in getting the LCC to provide £300 to plant extra large trees (30 feet) along the school boundary. A lot of cases do in fact turn out like this and we include it to show what could be called the negative side of the Bureau's fact-finding job.

**44. Derelict Camps.** As long as the present system for the derequisition of Service buildings continues, with compensation quite inadequate for their clearance, such clearance will rarely be

done. Many local authorities, with philosophic lethargy, have taken that as that. This summer, however, Pembrokeshire County Council has set a more vigorous precedent. They accepted the offer of voluntary work made by six Cambridge students, and paid their expenses (travel, food, insurance) in the clearance of a prize eyesore at Soldier's Rock, overlooking Milford Haven and inside the National Park. A dozen buildings were reduced to rubble, thirteen acres of land and a fine view were redeemed for the National Park; the cost to the County Council was £60. The leader of the six, Michael Dower, is now seeking sites all over England for similar treatment next year, and volunteers to do the job. He may be contacted either through Counter-Attack or at 35 Belsize Square, London, NW3.



**45. Kingsdown, Bristol (City Council).** The character of Kingsdown is unique: an eighteenth-century suburb built vertically instead of horizontally, terraced up a steep hillside with enormous southward views over the whole of the city centre. Some of it is slum and will have to come down; the residents fear that it will come down piecemeal without any overall plan and then be replaced by schemes of flats which will ignore the townscape problem completely. The first step to a true remaking of Kingsdown, which should be in the nature of skin-grafting, not amputation, is a worked-out proposal by the City for the whole area—a supplementary Development Plan—so that the whole area can be discussed by both sides, if necessary at a public inquiry. This overall scheme has been promised but has not yet appeared, and meanwhile the first clearance orders are going forward. There isn't much time left.

**46. Fareham, Hants (Borough Engineer and Architectural Assistant).** A gift of £200 to provide a municipal clock isn't a likely source of visual pleasure in 1957. In fact, that sum produced the delightful example shown here, 5 and 6, designed by P. B. Hollins in the Borough Engineer's office (particularly delightful because it is not just "good design" *à la* contemporary furniture shops; it has individuality of exactly the same sort as made the local Georgian houses so much better than the pattern books). There was considerable opposition, as a monumental clock was wanted, but the design went forward promoted by the Borough Engineer, K. E. Trask. The clock mounting serves also as a 25-ft. street lamp and was originally intended to have a paved street island and two concrete bollards; the

[continued on page 86]



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### A MANDERS CASE HISTORY

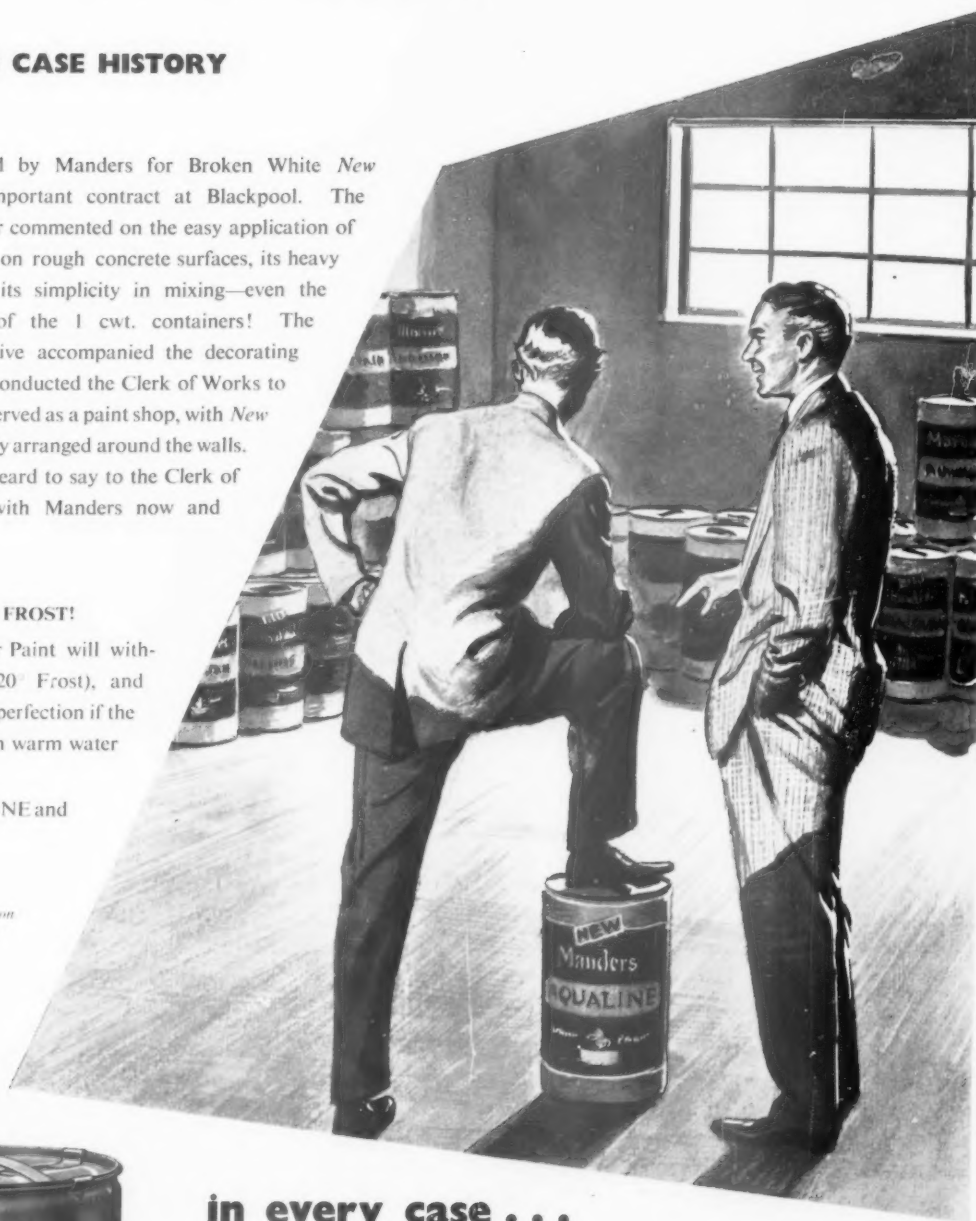
An order was filled by Manders for Broken White *New Aqualine* for an important contract at Blackpool. The decorating contractor commented on the easy application of *New Aqualine* even on rough concrete surfaces, its heavy obliterating power, its simplicity in mixing—even the smart appearance of the 1 cwt. containers! The Manders representative accompanied the decorating contractor when he conducted the Clerk of Works to a room on the job reserved as a paint shop, with *New Aqualine* Kegs smartly arranged around the walls. The contractor was heard to say to the Clerk of Works: "I deal with Manders now and always . . ."

#### NOT AFFECTED BY FROST!

*New Aqualine* Water Paint will withstand up to 12 F (20° Frost), and quickly regains peak perfection if the frozen keg is placed in warm water or a warm room.

Specify *New AQUALINE* and cut site losses!

\* Ask for further information on this superb water paint to be sent to you immediately.



in every case . . .

# AQUALINE

**proves the best**

**MANDER BROTHERS LTD., (Dept. F.I) WOLVERHAMPTON**

**Telephone: Wolverhampton 20601**



continued from page 84]

Ministry of Transport, however, insisted on the standard street island and bollards.

Another instance of Mr. Trask's handiwork, jointly with the Hampshire County Surveyor, can be seen in the simple but careful detailing of the widening of A27 at the east end of the town; we seem to be forced to malign Borough Engineers so often that we are only too pleased to do the opposite whenever possible.

5 and 6, the new clock in the High Street at Fareham.



#### CONTRACTORS etc

**Telephone Exchange, City of London.** Architect: Ministry of Works. General contractors: Messrs. Terson Ltd.

**Town Centre, Stevenage.** Architect: L. G. Vincent. General contractors: Harry Neal Ltd.

**Church, Midhurst.** Architect: Guy Morgan and Partners. General contractors: Y. J. Lovell & Son. Sub-contractors: Stone: Messrs. Stoneman.

**Electrical:** A. H. Cornwall & Sons. Windows: Luxfer Ltd. **Steelwork:** Boulton & Paul Ltd.

**Synagogue, St John's Wood.** Architect: T. P. Bennett & Son. General contractors: A. Roberts & Co. Reinforcement: G.K.N. Reinforcements Ltd. Heating and ventilation: Rosser & Russell Ltd. Facing bricks: H. J. Greenhams Ltd.

**Offices, City of London.** Architects: T. P. Bennett & Son. General contractors: Sir Robert McAlpine & Son. Sub-contractors: Lifts: Otis Elevator Co. Heating and ventilation: Matthew Hall & Co. Electricity: Matthew Hall & Co. Granite facing: Cooper Wettern Co. Portland stone: Bath & Portland Stone Firms Ltd. Facing bricks: Henry J. Greenham (1929) Ltd.

**Offices, Knightsbridge.** Architect: Guy Morgan. General contractors: Taylor Woodrow (Constn.) Ltd. Sub-contractors: Heating and plumbing: Ellis (Kensington) Ltd. Electrical: Troughton & Young Ltd. Lifts: Otis Elevator Ltd. Windows: Crittall Ltd. Granite: Fenning & Co.; Anselm Odling & Co.; Brookes Ltd. Portland stone, sprinklers, drenchers and steel roller: Portland Stone Co. Shutters: Mather & Platt Ltd.

**Offices, Manchester.** Architect: Ministry of Works. General contractors: J. Gerrard & Sons. Sub-contractors: Portland stone: South Western Stone Co. Metal windows and doors: George Wragge. Terrazzo: Hulme & Potts. Asphalt floors: Davies Bros. Glazed walling: Proderite Ltd. Felt roofing: Limmer & Trinidad Co. Steelwork: Peers Ltd.

**Builders' Offices, Crawley.** Architect: Edward D. Mills. General contractors: James Longley & Co.

**St. Peter's Square, Manchester.** Architect: Arthur Bailey. General contractors: H. Fairweather & Co. Sub-contractors: Heating, hot water and ventilation: Rosser & Russell Ltd. Metal windows, pavement and roof lights: Luxfer Ltd. Stonework: William Moss & Sons. Lifts: J. & E. Hall Ltd. Fire protection: Atlas Sprinkler Co. Piling: The Cementation Co. Electrical installations: Troughton & Young Ltd. Asphalt: The General Asphalt Co. Terrazzo: Conways (Tiles & Terrazzo) Ltd. Collapsible gate: Roller Shutters Ltd. Copper slots and cramps: G. Harrison & Son. Lightning conductors: J. W. Gray & Son. Artificial stone: Gurlings Ferro-Concrete Co. Car turntables: Francis Theakston (1933) Ltd. Wrot iron work: Brookes & Co. (1925); Culford Art Metal Co. Sanitary fittings: John Bolding & Son.

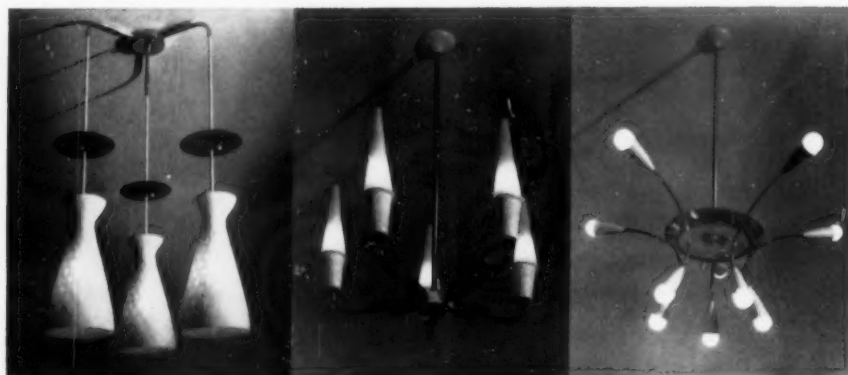
**Stores, Bexleyheath.** Architect: Arthur Bailey. Contractor for foundations: J. Gerrard & Sons. Steel construction: Redpath Brown & Co.

**Colliery, Blyth.** Architects: Watson and Coates. General contractors: Holland, Hannen & Cubbitt.

**Physics Building, Liverpool.** Architect: Basil Spence. General contractors: Holland, Hannen & Cubitt Ltd.

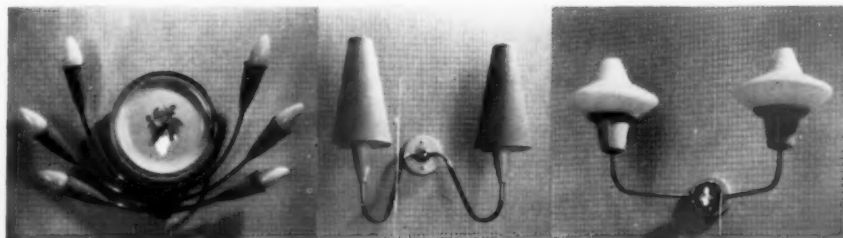
#### Correction

John Crosley and Sons were omitted from the contractors to the House at Beaulieu, AR, October, 1957; they supplied the carpets, which were dyed specially.



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